Wind Energy
What Makes Us Different

Competencies across all modes

Financial stability and investment resources

Ability to combine rail service with other modes

Strong BNSF relationship, but with true rail neutrality

Proactive and innovative solutions

A+

Among highest satisfaction scores in the industry
Our Range of Services

- Truck
- Rail
- Intermodal
- Project Cargo
- International (NVOCC Ocean and Air)
- Managed Transportation Services
- International & Domestic Air
- Customs Brokerage
BNSF Railroad Relationship

- Burlington Northern Santa Fe, LLC
  - $24B organization
  - Inherent brand equity
- Strong backing / competitive advantage in 3PL market
- Capital available for technology investment
- Have resources and support from BNSFR, but are independent – e.g. rail neutrality
Key Challenges

- **Investment / Recovery**
- **Clearance**
- **Rail**
- **Ongoing Innovation**
- **Truck**
- **Infrastructure**
Why Wind Energy?

- Logistics costs outpace GDP 2:1
- Wind components are only getting bigger and better
- Innovation – repowering old technology
- Berkshire Energy Commitment
- Global Opportunities
First Wind Farm

Greenfield, NH
1980
Plainview – If you build it....
Plainview – First train – March 2015
Why Plainview?

Plainview, TX

Location
- Within 75 miles of 3300MW of proposed wind farms
- Highway 70 for east/west truck deliveries
- I – 27 for north/south

Availability of Land
- BNSFL has 95 acres adjacent to rail to facilitate storage of wind components

First Class economic development team and local government

Rail Service
- On BNSF Railway’s Plainview subdivision
- Capacity to add a train or two a week without creating congestion
- BNSF extending 2 tracks to add capacity
2015 Wind Farms - Plainview

- Bluestem
- Briscoe Wind
- Cedar Bluff
- Colbeck’s Corner
- Gunsight
- Javelina
- Mariah Storage
- Nextera TPO 47
- Seiling Wind II
- Sendero
- Shannon Wind
- Wake Wind
- Wasatch
- Roosevelt
Plainview, TX

Handled 3,447 Wind Components in 2015
Wind Distribution Center

Customer Requirements

- Rail location adjacent to flat compatible ground
- 10-20 acres for storage
- 6,000 feet of track
- Truck availability – deliveries are normally within 100 miles
- Highway within close proximity
- No overhead height restrictions
- Local crane, forklift and fuel availability
- Fenced, lighting & 24 hour security (If requested)
Wind Turbine Project
Sunray, TX

141 Miles north of Plainview
Secondary location – far north TX & OK panhandle
Railhead Operations

2015 Project Sites

- Sunray, TX - 35 acres / 88 complete GE turbines
- Kiowa, KS - 22 acres / 524 Siemens 53m blades
- Emporia, KS - 35 acres / 95 complete Gamesa turbines
- Warren, ND - 15 acres / 1,150 LM Blades shipped since 3/2013
- Langdon, ND - 11 acres / 75 complete Vestas turbines
- Plainview, TX – 95+ acres / Over 300 Vestas and GE turbines handled
- Wellington, KS - 10 acres / 75 complete Vestas turbines
Dimensional Shipping

- Full Scope 3PL Services
- Engineering
- Clearance Submission
- Rail Logistics
- Shiftable / Schnabel Car Operations
- Specialize in Power Generation
BNSFL Specialty Railcars

- 20 Axle Schnabel – 1,135,000 pound load limit
- 12 Axle Schnabel – 700,000 pound load limit
- 3 Cabooses – Rider support for special moves
Blade Runner Rail

- Road test successful
  - Less vibration
  - Reduced G-force
- OEM & blade manufacturer tested
- Now fabricating

Improvement in ride quality by reducing vibrations and G-forces on blades

Move increasingly longer blades on rail networks

Improved clearance envelope makes majority of North American markets rail accessible
Blade Runner Ocean

- Successful test loading
- Validation from bulk ship operators
- Targeted in-service Q4 2015

Structural integrity reduces lashing requirements significantly

Stowage system can be used for on-dock and facility blade management

Increase bulk ship capacity by 40% or more

Universal application regardless of blade length

Stowage cells allow ships to be loaded or unloaded in half the time
Tower Saddle Design

- BNSFL has designed the universal tower saddle designed to meet AAR OTLR standards with a focus on damage prevention, quick loading and repeatability.
  - Reduces costs for shipping towers via rail
  - Universal saddle allows multiple tower sections to be used with the same saddle
  - Preventing obsolescence
  - Lowering cost
- Our specially designed fixtures have transported over 90% of all wind energy components that have ever moved over rail.
- Universal fixtures for transporting both blades and towers by rail patents pending.
Thank You.

www.BNSFLogistics.com