



Zephyr Power Transmission Project

Presentation to Wyoming Infrastructure Authority

January 27th, 2009



Presentation Outline

1. Obligatory commercial on TransCanada
2. Zephyr & Chinook: Project Overview
3. Zephyr Project:
 - Current Configuration
 - Project Progress
 - Commercial Model
 - Project Timeline
4. Why HVDC?
5. Project Risks

TransCanada – A Leading North American Energy Infrastructure Company

- TransCanada Corporation (TRP) listed NYSE and TSX
- Competitively positioned in pipeline and energy infrastructure
- Almost \$30 billion of premium pipeline and energy assets
- Skilled, expert people with strong technical knowledge
- Strong financial position

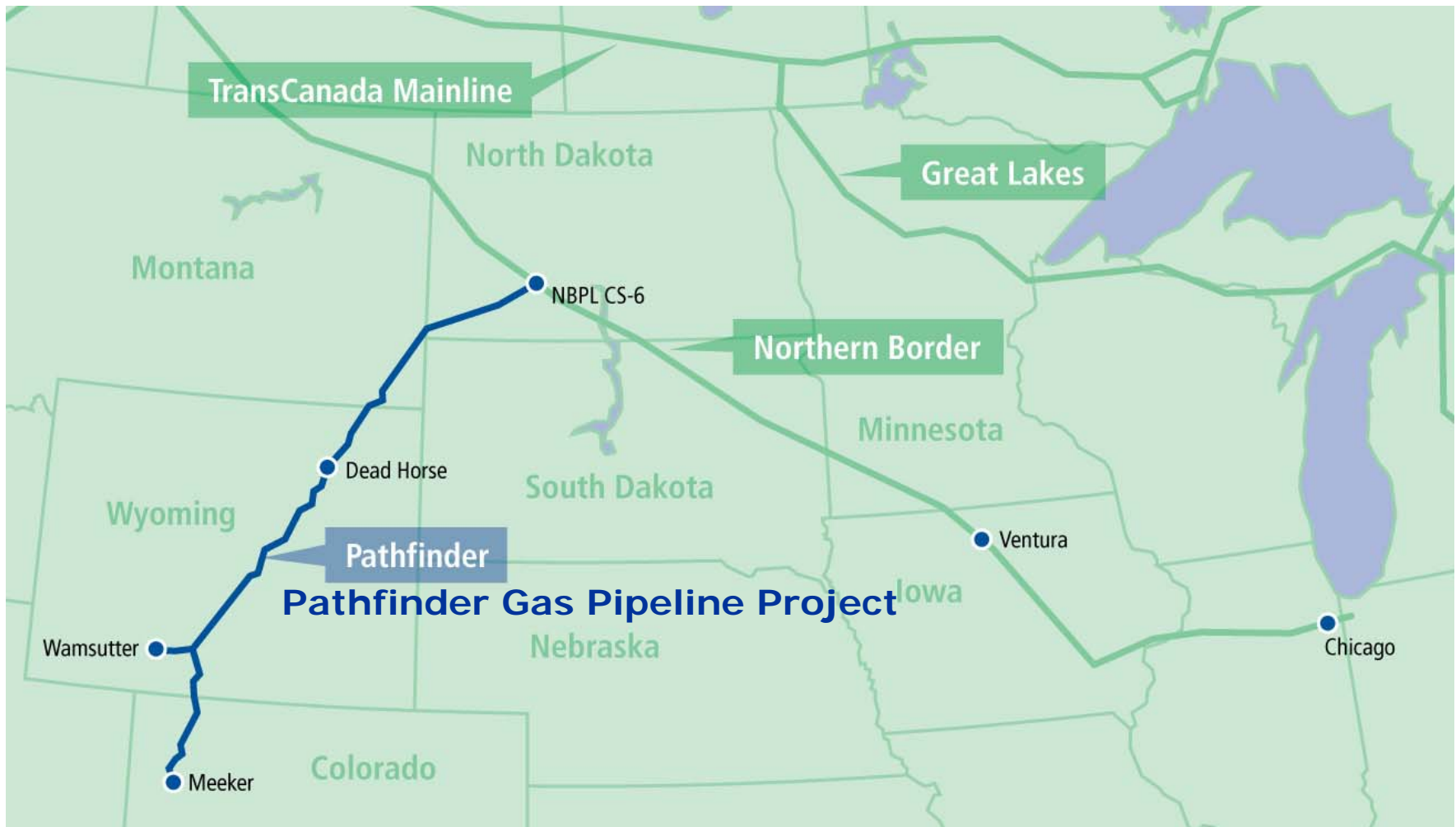


Portfolio of Quality Assets



- 36,500 mi of wholly owned pipeline
- Throughput of 15 Bcf/d
- 370 Bcf of natural gas storage capacity
- 19 power plants
- 11,000 megawatts
- Major new oil pipeline under construction (Keystone)
- Facilities & employees > 32 states
- More than 50% of our employees are in the US

TransCanada: An expanding Wyoming footprint



TransCanada and Power Transmission

- Developing power transmission projects in both the US & Canada
- Need for independent transmission providers
 - Merchant (non-utility)
 - Market-based (negotiated) rates
- Focus on large capacity/long distance projects
- Draw on core competencies
 - Expertise in development of long, linear infrastructure
 - High level of technical & regulatory expertise
 - Proficient in managing diverse shipper and stakeholder interests
- Growth opportunity & offers sufficient scale
- Fits capital profile
 - 2012+ construction



Zephyr & Chinook Projects



- Two, separate, but complementary 1,000+ mile HVDC transmission lines
- Each up to 3,000 MW and each US\$3 billion
- Focus on connecting wind resources in Wyoming and Montana to growing loads in U.S. Southwest
- Capitalize on the growing demand for “green power”
- Converter stations (750 MW) on each line at Borah, Idaho to connect to Pacific NW and Idaho wind resources
- 100% TransCanada equity ownership

Zephyr: Current Configuration

- 1100 mile 500 kV HVDC system commencing at Medicine Bow, Wyoming and terminating south of Las Vegas, Nevada
- One 3,000 MW DC converter station in Wyoming
- One 750 MW DC converter station at Borah, Idaho
- One 3,000 MW converter station south of Las Vegas, Nevada
- Approximately \$1.2B of estimated \$3B cost invested in Wyoming

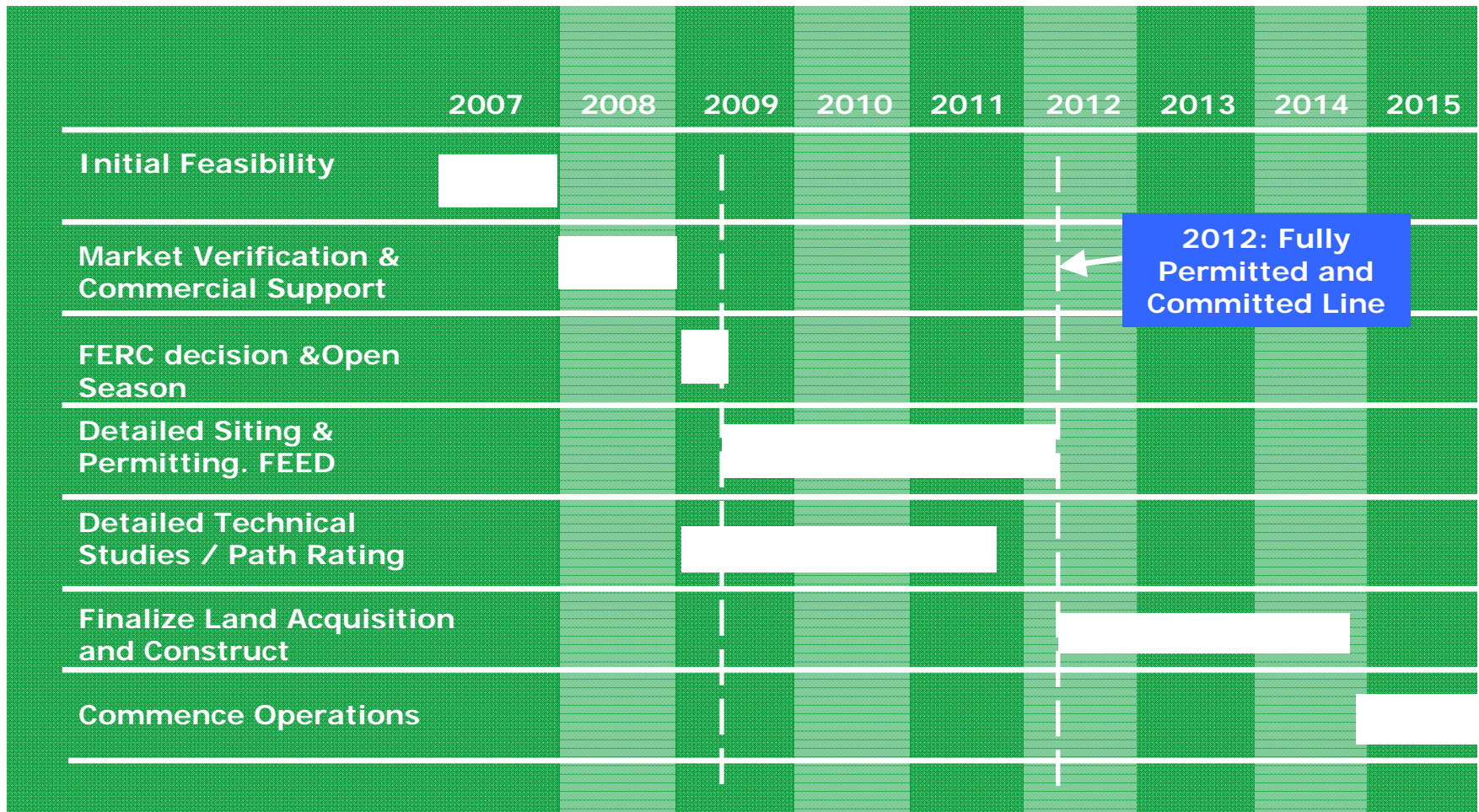
Zephyr : Project Progress

- Planning and Engineering
 - Preliminary line design, tower design, conductor selection, foundation design, cost estimates and risk estimates
 - Technology assessment and reviews
 - Commenced WECC regional planning & path rating process
- Siting & Permitting
 - Preferred route selected and reviewed with state and federal agencies
 - Existing corridors utilized on Federal lands or new corridors added to land use plans
 - Met with counties along route
 - Federal corridor submission, coordinating with Section 368 PEIS

Zephyr : Project Progress (continued)

- Commercial
 - “Non-Binding Expressions of Interest” received in Q3/08
 - Robust wind-developer response
 - Prior to “financial-meltdown”
 - Detailed capital costs estimates completed & indicative rates determined
 - Prior to “financial-meltdown”
 - Extensive potential customer discussions
 - Anchor Shipper agreement executed
 - Section 205 filing with FERC
 - Open Season (spring 2009)

Zephyr: Project Timeline



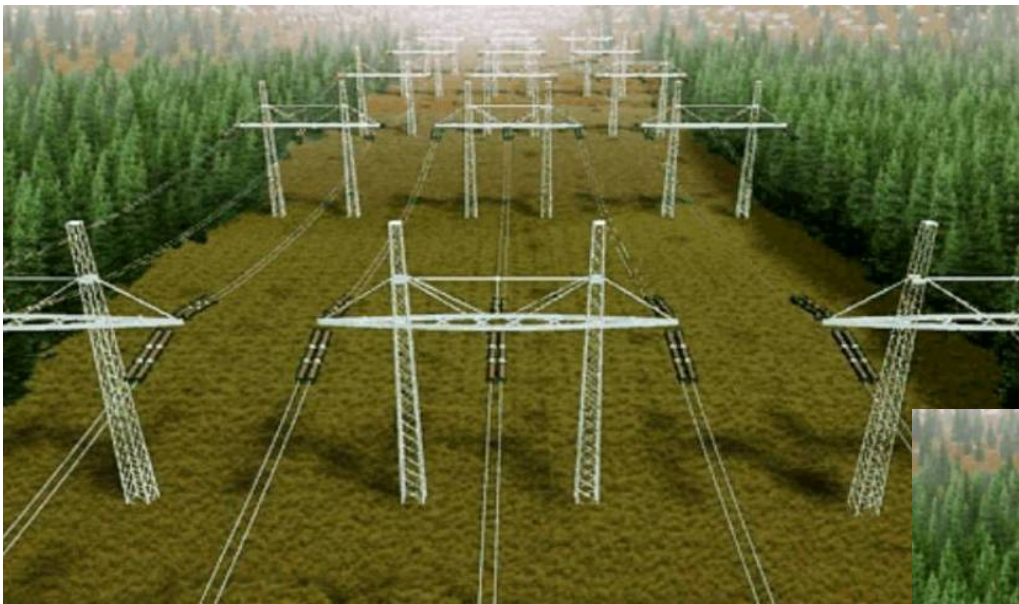
Zephyr Business Model

- Anchor Shipper
 - 1500 MW (not subject to pro-ration in subsequent Open Season)
 - 25 year commitment
- Open Season Shippers
 - Remaining 1500 MW (50% of Zephyr capacity)
- Cost sharing
 - TransCanada pays 50% of development costs
 - Anchor Shipper & Open Season Shippers pay 50% of the development costs
 - Shipper development costs to be credited against transportation tolls
- Stage Gate Approach
 - Defined off ramps in PA

Zephyr: Why HVDC?

- HVDC technology improvements over the past 20 years
 - Lower cost, higher performance
 - Most economic transfer of power over longer distances
 - More conducive to handling wind generation
- Avoids intermediate utility control & minimizes integration issues
- Better economics for generators – lower cost to consumers
 - Lower cost to construct, lower transmission tariffs
 - Substantially lower line losses
 - Resulting in lower delivered cost to markets
- Environmentally superior
 - Smaller footprint – narrower right of way
 - Fewer lines
 - Much lower EMF concern

Zephyr: HVDC is Environmentally Superior



AC Corridor with 3 @ 500kV lines, for a total capacity of 3000-4000 MW

DC Corridor with 1 @ 500kV bi-pole line, for a total capacity of 3000 MW



NL 4 conductors

Zephyr: Project Risks

- FERC denial of Anchor Shipper concept
- Generator commercial support fails to materialize in open season
- Insufficient load support for generator contracts
- Interconnection issues
- Lack of consistent and unified political support in the West for these types of projects
- Routing congestion & land owner opposition
- A delayed and inefficient siting and permitting process
 - Will require a very coordinated and focused state and federal process
- Potentially misguided efforts to “Federalize” the transmission system
- Viewing interstate transmission proposal as being competitive vs. being complementary

We look forward to working with WIA and other project developers