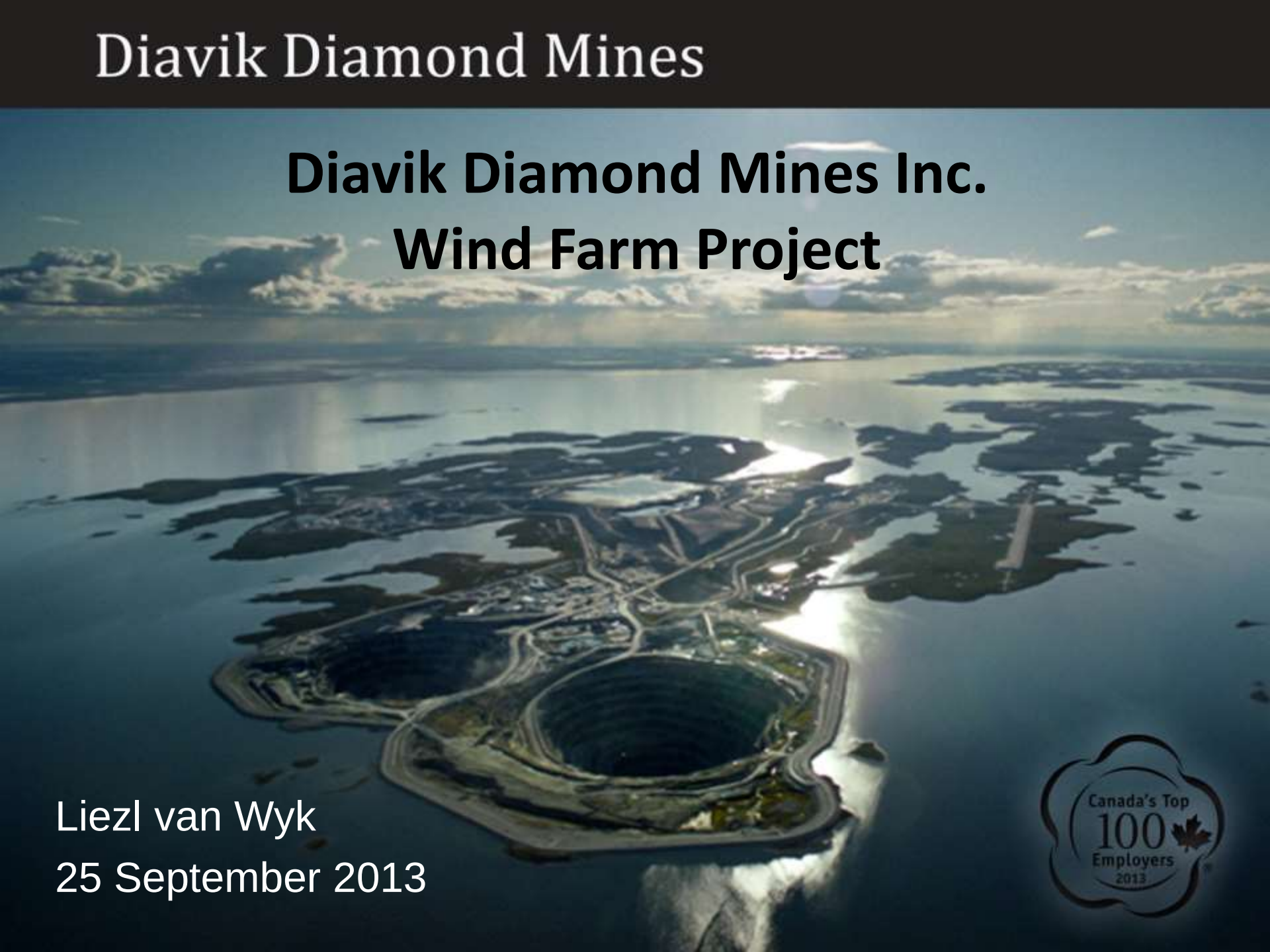
Diavik Diamond Mines Inc.
Wind Farm Project



Liezl van Wyk

25 September 2013

Where we are located

Diavik Diamond Mine at a Glance

- 5 John T Ryan safety awards
- Reserves: 18.9m tonnes at 3.1 c/t
- Mining 3 kimberlite pipes
- Average workforce: 1,165
- Construction 2000-2002
- Production began in 2003
- Sept 2012 – transition to all underground complete

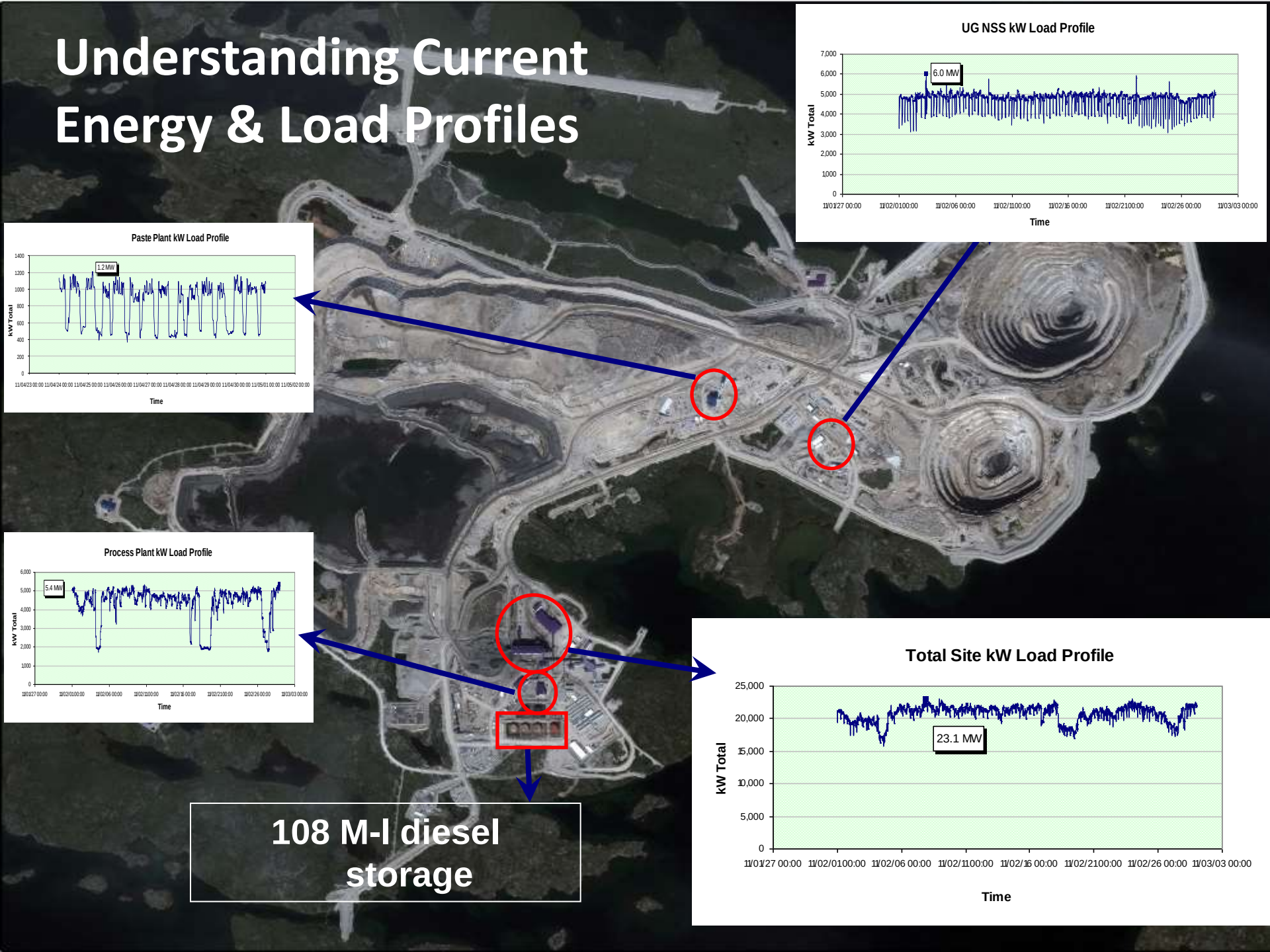
Energy context for northern mines

- Remote and off-grid
- No Transmission grid future options
- Energy cost >25% of operational cost
- 100% diesel driven – supply chain starts in Alberta
- Ice road for 6 weeks for >70 million liters diesel resupply
  - 2000 loads per winter road season
- Risk exposure – climate change, fuel price & volatility
  - Diesel cost > $1.32/liter; tariff > $0.31/kWh
- Power security critical safety priority
  - Arctic temperatures below -30C
  - Underground Mining beneath diked Lac de Gras

Electrical Grid basics

- 2 Powerhouses
  - PH1: 5 x 4.4 MW Cat generators
  - PH2: 4 x 4.4 MW Cat generators, 2 x 3.6 MW
- 13. 8kV network, good QOS
- Power Factor: >0.9 (< 0.83 for UG)
- High and low heat recovery on gensets, connected to glycol loops
- Manually operated power grid
- System grounded via NGR
- System loads of 22 – 26 MW

Understanding Current Energy & Load Profiles



Energy Options

- Connecting to existing grid and expanding hydro capacity – ROI prohibitive
- Solar – NPV negative with low penetration
- Geothermal – low temperature differentials
- Wind – largest penetration and NPV positive
- Diesel will continue to account for majority of energy source

Wind Farm at a Glance

- Four E70 Enercon 2.3 MW turbines (9.2MW total)
- Projected to provide 17 GWh of renewable energy per year
- Reliability – direct drive, gearless generator
- Blade de-icing system
- Reduce diesel consumption by 10% (YTD >3.0M liters)
- Reduce carbon footprint by 6% (12,000 tonnes CO_2–e)

Project Economics

- Project competed for Diavik and Rio Tinto capital
- Capex Budget: $33M
- Actual spend: $31M
- Positive NPV
- Payback < 8yrs
- Economies of scale selection
- Higher risk model than typical Diavik project strategies

Project Timeline

- 3 year wind assessment concluded: Dec ‘10
- **Capex approval Rio Tinto: May ‘11**
- NRCan, NavCan, AANDC, EC approvals: June ‘11
- **Enercon turbines contract sign: July ‘11**
- Geotechnical drilling & micro siting: July ‘11
- Roads, foundation, crane pads: Aug - Nov ’11
- Winter road shipment to site: Febr/Mar ‘12
- Tower, nacelle and blade lifts, electrical work: July- Sept ‘12
- Commissioning: Sept/Oct ’12
- **Operational: End Sept 2012**

Logistics had to be well thought out..

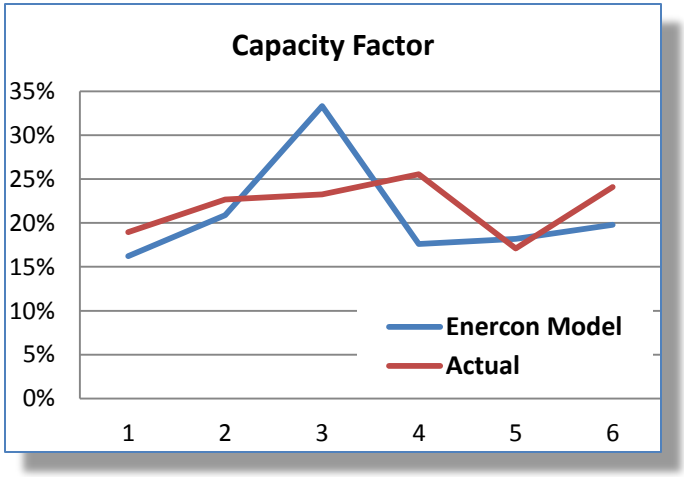
Wind Farm Challenges

- 2012 – 2013 winter was the coldest in 20+ years
- Lubricants and Electronics need to operate at -30 to -40C
- Little frost build up on blades tolerated (blade heating)
- Tower heating for access and electronics
- Accurate calculation of diesel litres displaced & spinning reserve

Comparisons of Actual to Model (1/2)

- Yield (kWh)
  - Good operating months: 7% ahead of model
  - Cold/poor performing Jan/Dec delivered <15% of yield budgeted
  - Forecasting the P90 in Genivar model (15GWh) vs P50 originally in budget (17.2 GWh)

- Capacity Factor
  - Genivar Net CF: 21 %
  - Same period actual: 22% (excl Jan, Dec)
  - CF monthly profile variances with model
  - P50 to P75 values in Genivar model
  - Resource model vs Turbine supplier
    - Different assumptions (22% vs 27%), different losses included

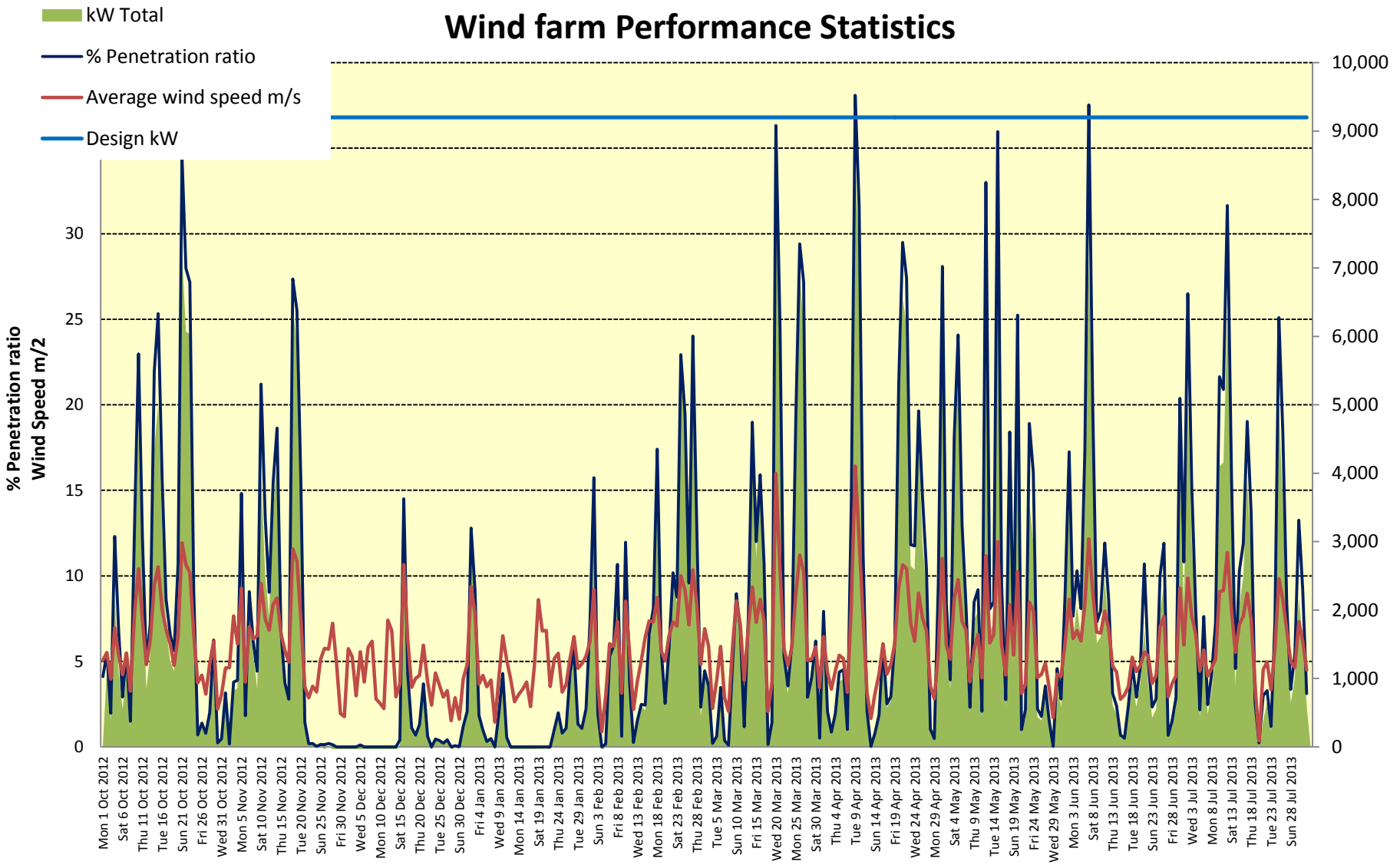


Comparisons of Actual to Model (2/2)

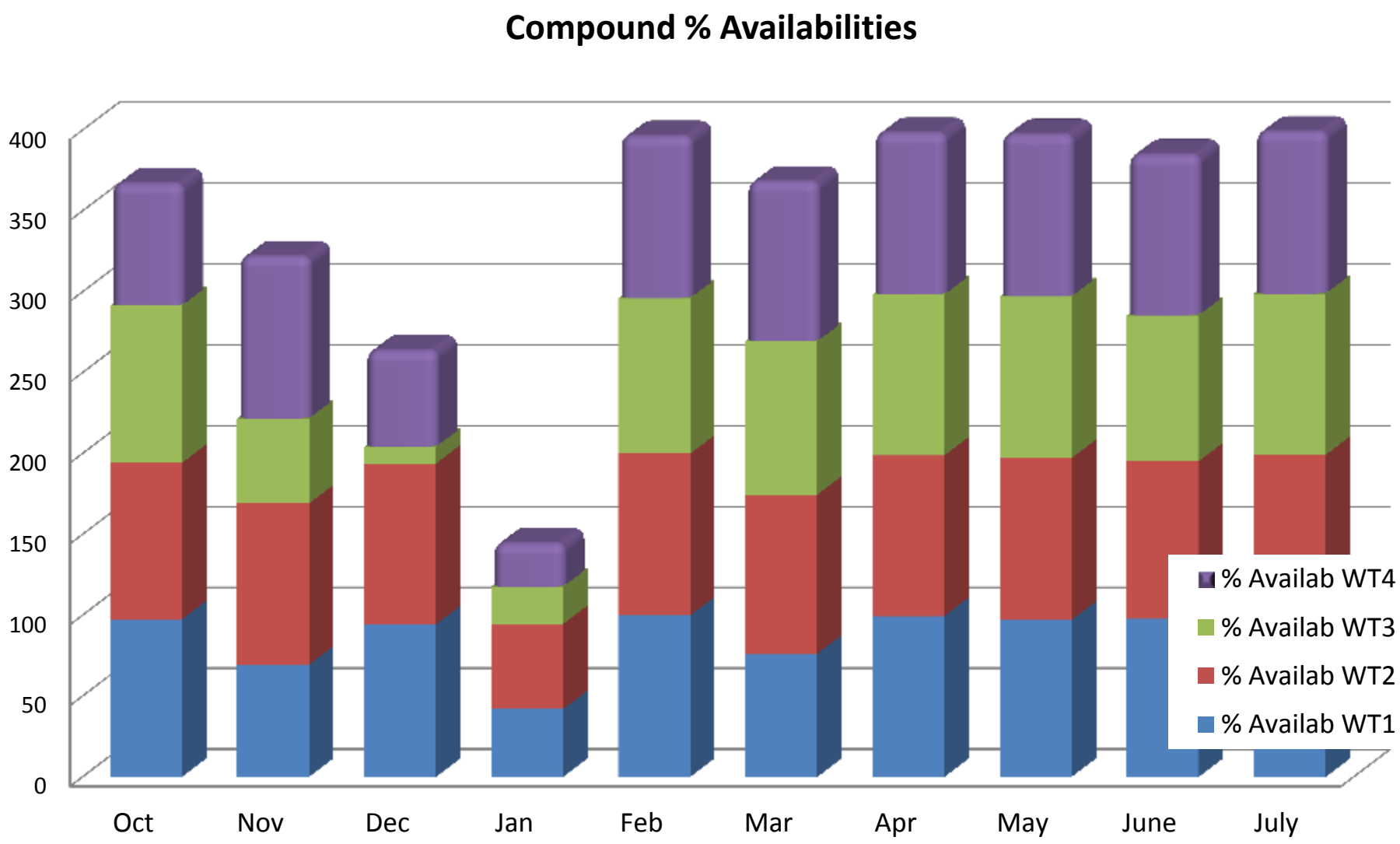
- Penetration Ratios
  - Maximum achieved 52%
  - Average of 9% (excl Dec, Jan)
  - High ratios tend to be associated with high voltages (>14.5kV)

- Wind Speed: Model @ 60m: 7.22 m/s
  - YTD Resembles 2008 data closest
  - Average of 6.3 m/s (excl Dec, Jan)

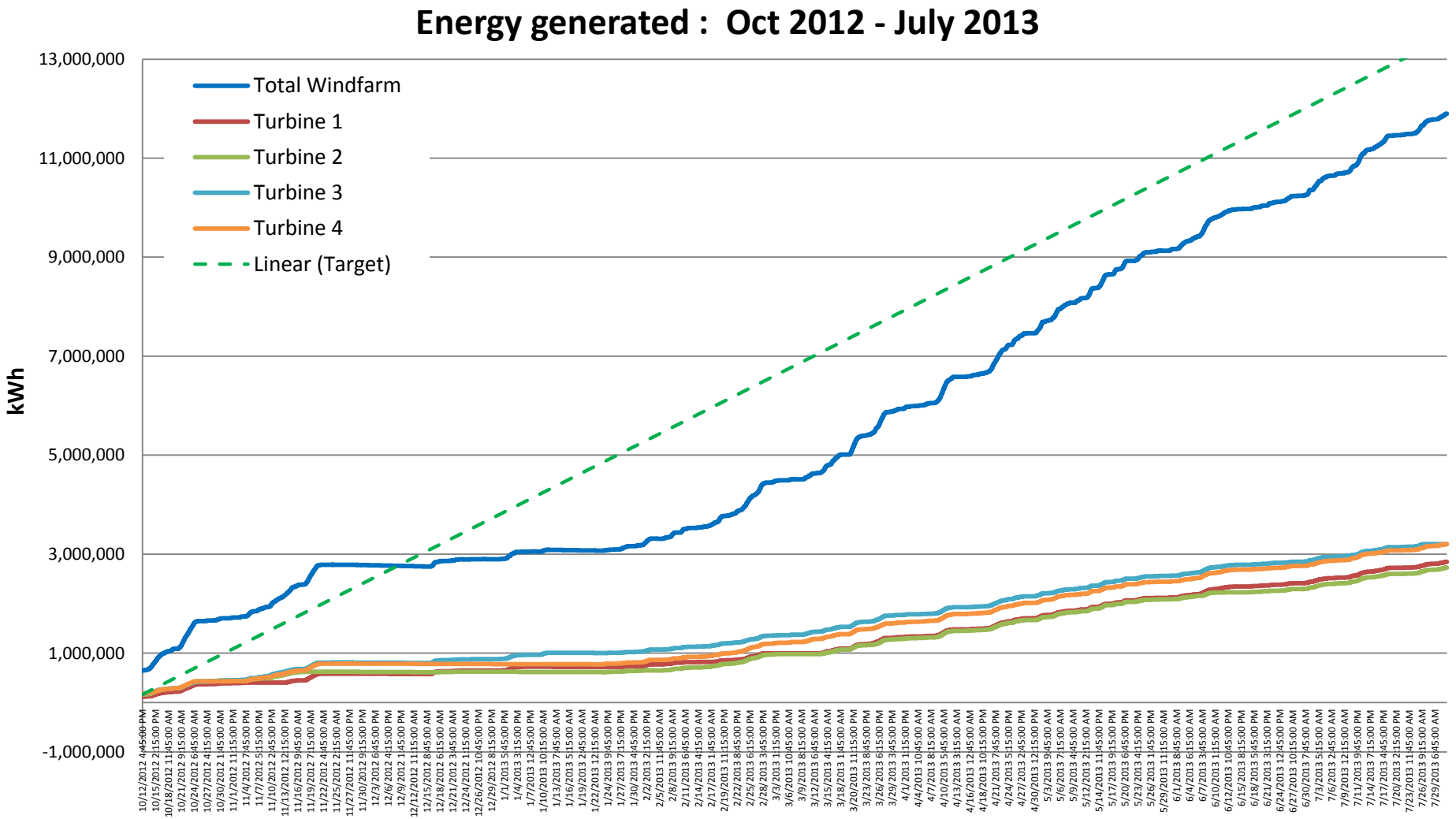
Supply – demand management focus



First winter operational challenges



On track to meet budgeted supply



Environment

- Windfarm within existing lease
- EnvCan, WLWB: Consideration of bird and caribou migration pattern; analogy to impact on cattle due to lacking case studies
- Voluntary bird mortality surveys
- Minimized footprint (crane pads used as laydown areas, fly rig for geotech foundation drilling)
- Early involvement and open communication with AANDC
- Archaeological study done for sacred aboriginal artifacts on project site

Communities

- Demonstrates wind power as a viable option for the North
- Early involvement of communities through engagement letters
- Community consultation showed no concerns with the project
- Presentations for EMAB (includes community representatives)
- Donated weather tower to Det'on Cho Earth Energy Giant Mine wind study

Project Innovations

Healthy list of In-house Innovations:

- Earthing/grounding
- SCADA
- Logistics
- Contracting
- Project costs

Mining well suited to construct at lower cost due to inhouse:

- Drilling and blasting
- Surveying
- HME and ground works
- Skills/trades
- Safety systems
- Batch plant & concrete mixing

Questions