SaskPower Linear Developments: Environmental Screening and Mitigation

2017 Native Prairie Restoration & Reclamation Workshop

> Regina, Saskatchewan February 9, 2017



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OUR KEY CHALLENGES

- Growing demand for power
- Aging system requires significant investment
- Emissions regulations eliminate one of our primary baseload power sources: coal without carbon capture
- Adding more renewable (but intermittent) generation sources



SASKATCHEWAN'S PRIMARY ELECTRICITY SUPPLIER

520,00 CUSTOMERS (9,800 new in 2015-16)

4,400 MW CAPACITY

3,747 MW NEW PEAK LOAD (2017)

157,000 KM OF POWER LINES



ENVIRONMENTAL SCREENING

- Planners and designers use tools to 'screen' projects for potential risk.
- Low risk projects are allowed to proceed through the planning process.
- Projects with potential risks are reviewed by environmental personnel.
- Environmental personnel determine legislative requirements and/or mitigations required.



RISK-BASED APPROACH

- In 2016, approximately 4300 projects were screened.
- The system determined that approximately 2300 required more detailed review
- SaskPower has to meet regulatory requirements, balance environmental, financial and social expectations while providing reliable service to the people of Saskatchewan.
- Efficient tools and processes are essential in order to meet both responsibilities.
 SaskPower



ENVIRONMENTAL SCREENING: PAST





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ENVIRONMENTAL SCREENING: PAST

SaskPower ENVIRONMENTAL SCREENING SYSTEM

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ENVIRONMENTAL SCREENING: CURRENT

- Continue to use a GIS platform
 - Project planners/designers are able to import their design drawing.
 - The system screens their design against the environmental data.
 - Forms were integrated into a workflow which streamlines the process while maintaining environmental protection and risk mitigation.
 - Records retained by the system.
- Improvements removed opportunities for human error.



SaskPower continually reviews its processes and tools. Future tools may include:

- Direct connection to SaskPower's design tools;
- Mobility applications to make environmental data available in the field;
- 'Live' connection to source data to ensure most current data is available.



ENVIRONMENTAL MITIGATION

Implementation of mitigation measures (pre 2015):

- Inconsistent
- Project by project
- Driven by permits

In 2015, Environmental Best Management Practices (BMPs):

- Standardized mitigation measures even on low risk projects
- Training provided to all employees and contractors involved in the development of linear infrastructure (i.e. powerlines)
- Improved consistency
- Improved environmental results



ENVIRONMENTAL MITIGATION

Currently, SaskPower has ten BMPs developed

- Surface Water
- Wildlife and Habitat
- Birds
- Native Grassland, Agricultural Land, and Sandhill Environments
- Soil
- Heritage Resources
- Tree and Shrub Clearing, Salvage and Disposal
- Weeds
- Disposal and Storage of Nonhazardous and Hazardous Waste
- Spills and Releases



Questions & Discussion

