Peace River Site C Hydro Project

Stage 2 - Environmental Studies

Study Outline: Local Climate Studies

Introduction

If the potential Site C project were to proceed, the creation of the potential reservoir may have localised climate effects, such as changes to the timing or amount of fog and humidity within the Peace River valley. Previous Site C climate studies were conducted in 1976 and 1979, and a review study was done in 1991. Updating of data and predictive models is required. Further climate data is needed as input to various engineering, environmental and socio-economic studies.

Study Components

The Stage 2 climate study includes the following components:

1. Review previous reports and determine study, model and data requirements.
2. Prepare a workplan outlining the recommended long-term climate monitoring program, including station location, type and instrumentation.
3. Install stations and collect wind data to assist in shoreline erosion studies
4. Run the Weather Research and Forecasting climate model to assess potential climatological changes associated with the project

Scope of Work

The Stage 2 climate study components are proceeding over 2008 and 2009.

Reporting

All climate study reporting is due by the end of 2009. Ongoing data collection will continue from climate stations located in the Peace River area.

Potential Next Steps

Additional climate monitoring stations would be established in the Peace River valley if the project proceeds to Stage 3: Regulatory-Environmental Assessment. Data collected at these stations may include a combination of measurements, such as air temperature, humidity, wind speed & direction, barometric pressure, global solar irradiance, fog frequency and density, particulate matter, heat fluxes and precipitation.