

Finance & Corporate Resources

Corporate Resources

Corporate Resources provides three key services to BC Hydro and the British Columbia Transmission Corporation (BCTC), namely property services, legal advice and representation, and responds to freedom of information inquiries and privacy issues.

Properties

Affected Employees

Located at 8th and 9th floors - 333 Dunsmuir Street, Vancouver

Properties provides strategic property asset and policy direction and a full range of property services to BC Hydro's business groups and service organizations in support of BC Hydro's property and real estate requirements.

Amongst the activities that the Properties group is involved are: property acquisition and negotiation services; right-of-way management and property referral services; negotiating with First Nations for property rights acquisitions, periodic rent reviews, expired permits and agreements, existing agreement compliance, deficient rights and resolution of past grievances; legal and paralegal services.

Legal Services and Freedom of Information Co-ordinating Office

Support Employees

Located at 17th floor - 333 Dunsmuir Street, Vancouver

Legal Services provides legal advice and representation, including administration and monitoring of outside legal services as required, and responds to inquiries and privacy issues under the Freedom of Information and Protection of Privacy Act through the Freedom of Information Co-ordinating Office (FOICO).

Legal Services, through internal and external counsel, provides comprehensive legal advice and representation in such areas as rates and regulatory matters, commercial transactions, environmental and First Nations issues, and major civil claims by and against BC Hydro.

Regulatory

Support Employees

Located at 17th floor - 333 Dunsmuir Street, Vancouver

Regulatory provides regulatory advice to BC Hydro's business areas and facilitates successful management of the company's business issues through the regulatory process. The SOC Compliance Office is part of the Regulatory group.

Regulatory forms the interface between BC Hydro and the BC Utilities Commission (BCUC), National Energy Board, and intervenors in regulatory proceedings and executes all regulatory applications, responses, and formal communications between BC Hydro and the Commission. Regulatory leads and manages interventions in the applications of other utilities where BC Hydro has an interest (e.g., BCTC, TGVI).

Regulatory researches, develops and defends BC Hydro's rate structures and associated terms and conditions of service for new rates. It administers BC Hydro's Electric Tariff, providing advice to the company on the application and interpretation of the terms and conditions of service. Regulatory also provides support for associated activities within BC Hydro such as contract negotiations, extension policies, contribution policies, and pricing issues in general.

Audit Services

Support Employees

Located at 8th floor - 333 Dunsmuir Street, Vancouver

Audit Services provides information to BC Hydro's management to facilitate the assessment of control measures and achievement of business objectives. Audit Services is comprised of two key groups: Core Audit and Environmental Management & Governance.

The Core Audit group mainly supports risk-based audits, which provide assurance that risks within key processes, operational areas, or initiatives are being adequately mitigated. A number of factors are used as input into the selection of these audits including results from the annual corporate-wide business risk assessment, which solicits input from senior managers to identify the principal risks facing BC Hydro. In addition, discussions with Group Controllers, senior management, and other stakeholders are used to identify areas of appropriate audit coverage.

Powerex

Power Marketing Organization outside of British Columbia

Located at 14th floor - 666 Burrard Street, Vancouver

Powerex is the wholly-owned power marketing subsidiary of BC Hydro, responsible for the purchase and sale of wholesale electricity and natural gas outside the BC Hydro system. More specifically, Powerex has the mandate to:

- optimize the capability of BC Hydro's generation system for trade, including purchasing energy for trade using the hydroelectric system;
- trade power and natural gas in the Western Interconnection and other select regions in North America; and
- optimize the purchase and sale of electricity and natural gas in relation to BC Hydro's capabilities and domestic requirements.

Powerex may also purchase energy from BC Hydro that is surplus to its domestic needs, and add that energy to its portfolio of resources for marketing outside the province. In its early years Powerex relied heavily on surplus BC Hydro energy to supply its trade customers. However in recent years, as BC Hydro's surplus has decreased, Powerex has increasingly been purchasing electricity from outside the BC Hydro system to meet its own trade commitments and to support BC Hydro's domestic needs. Powerex may also purchase energy from the marketplace for BC Hydro's domestic requirements when it can be purchased at prices lower than it costs to run the Heritage Resources.

Engineering, Aboriginal Relations & Generation (EARG)

Aboriginal Relations and Negotiations

Affected Employees

Located at 16th floor - 6911 Southpoint Drive, Burnaby

BC Hydro has many power generation facilities located in First Nations' traditional territories. BC Hydro also has more than 2,000 kilometres of transmission and distribution lines located on about 500 reserves belonging to 169 of the 197 First Nations in the province.

There is perhaps no part of BC Hydro EARG's business where recognition of the risks has grown so large in such a short period of time than in the area of aboriginal relations due to changes in aboriginal law, government policy, and First Nation expectations. Treaty settlement negotiations between First Nations and the two levels of government could alter the nature of relationships between First Nations and BC Hydro. New laws regarding the obligation to consult have placed a higher requirement on BC Hydro to develop a positive relationship with those First Nations in whose territory BC Hydro's facilities operate.

The primary First Nations issue for BC Hydro EARG is resolution of historic grievances. BC Hydro is currently engaged in sensitive grievance negotiations on the Peace and Bridge River systems. BC Hydro's ongoing strategy is to develop mutually beneficial business relationships with First Nations. Economic development initiatives have assisted many First Nation businesses with a solid foundation from which to become successful.

Safety & Technical Trades Training

Support Employees

Located at various offices throughout British Columbia

Technical Training provides support to Field Operations managers in Transmission Services and Transmission Engineering who manage the BCTC assets. They also monitor safety on sites that include BCTC staff and contractors.

Develop and deliver technical courses and workplace training initiatives for various trades groups including Protection and Control (CPC) technologists. Real-time preventative maintenance work for BCTC, for the purpose of training, is carried out from time to time.

Resource Management

Power purchaser within British Columbia

Located at: 15th floor - 6911 Southpoint Drive, Burnaby

Generation Resource Management (previously containing groups Integrated Portfolio Management and System Operations) is responsible for energy portfolio management for short term domestic obligations. This responsibility contains both electricity and gas energy purchasing, risk management and analysis, market and system modelling for operations and planning purposes, and management of BC Hydro's co-ordination agreements.

System Optimization

Power purchaser within British Columbia

Located at: 15th floor - 6911 Southpoint Drive, Burnaby

The System Optimization group within Generation Resource Management is responsible for domestic energy portfolio management and for system resource coordination. This responsibility includes market electricity purchasing, risk management and analysis, market and system

modelling for operations and planning purposes, and management of BC Hydro's coordination agreements. System Optimization is also responsible for managing the coordination between BC Hydro and Powerex, whereby Powerex has access to excess system capability of BC Hydro, as governed by the Transfer Pricing Agreement. Finally, System Optimization is responsible for operations planning activities for the Columbia and Peace generating plants.

Operations Planning

Co-located with Power purchaser within British Columbia

Located at: 15th floor - 6911 Southpoint Drive, Burnaby

Operations Planning is responsible for planning the operation of BC Hydro's thermal and storage reservoir projects within in the next day to one-year planning horizon in order to meet triple-bottom-line objectives. The department plans the hydro operations of projects within the Bridge Coastal, and Kootenay Regions and works closely with System Optimization with respect to planning the operation of the Peace and Columbia systems. One of the main functions of the department is to optimize the timing and duration of plant and transmission outages.

Operations Planning are also responsible for managing a number of contracts and agreements with Independent Power Producers and others.

Reliability & Planning

Co-located with Power purchaser within British Columbia

Located at: 15th floor - 6911 Southpoint Drive, Burnaby

Reliability and Planning is responsible to assess system supply/demand balance over a three-year time horizon, develop contingency plans to ensure supply reliability, and conduct operational and financial evaluation for generation projects and coordination agreements.

System Operations – Planning, Scheduling & Operations

Co-located with the Power Marketing Organization

Located at 14th floor - 666 Burrard Street, Vancouver

System Operation's Planning, Operations and Scheduling group (PSOSE) develops detailed operating plans daily for each reservoir and power plant in order to manage reservoir storage and outflow, to meet domestic load requirements and to take advantage of market opportunities. PSOSE gets information from Powerex on expectations of market prices and import/export quantities and provides Powerex with information on the system capability expected to be available for purchases/ sales to/from the BC Hydro system. Also, PSOSE uses this information to plan maintenance outages. If, for example, market prices are expected to be high, PSOSE might accelerate, re-schedule, or postpone a maintenance outage reducing the domestic use of market imports and/or increasing the capacity available to Powerex for trade. This co-ordinated approach between PSOSE and Powerex is conducted on a 24 hour basis, as the plans are adjusted hourly to meet changing conditions throughout the day and night.

Transmission Engineering

Affected Employees

Located at Podium A, 1st and 3rd floors, 6911 Southpoint Drive, Burnaby

All Engineering resources delivering projects and services to BCTC are located and managed by one group, Transmission Engineering. The group has three project delivery divisions (P&C/Telcomm, Stations, and Transmission) and one support division (Environment, Contracts & Construction). Transmission Engineering has responsibility for:

- delivering Stations and Transmission capital projects,
- maintenance services,
- survey & photogrammetry services,
- protection & control projects and services for BC Hydro's entire power system infrastructure including substations, transmission lines and control centres, and
- planning, support and projects associated with BC Hydro's key corporate networks including microwave, radio, fibre-optic and telephones.

Distribution Engineering

Support Employees

Located at Podium A, 2nd floor, 6911 Southpoint Drive, Burnaby

Distribution Engineering delivers full-service distribution engineering including both capital projects and services ranging up to 35kV. Services such as load forecasting and one-year feeder capacity planning support asset management. Other services include standards, design and construction guides, commodities support, distribution automation, power quality complaint investigation and Independent Power Producer (IPP) interconnection. Distribution Team provides complete distribution project delivery including project identification and prioritization, project management and design. Projects include distribution O/H, U/G and submarine lines and feeders and equipment such as pole top switches and reclosers.

Office of the Chief Engineer

Support Employees

Located at 6911 Southpoint Drive, Burnaby

Provides technical oversight and quality assurance reviews of key projects and initiatives being delivered by the Engineering group to its clients, including BC Hydro and BCTC.

Provides technical leadership for the Engineering disciplines and leads participation in external technical associations and industry interest groups, and with other utilities, educational institutes and supplier communities.

Leads or participates on teams engaged in strategic, innovative, high risk or complex engineering initiatives and provides these and similar services to all of BC Hydro where required or in response to clients' strategic, high priority needs as requested.

Quality Management

Support Employees

Located at 15th Floor - 6911 Southpoint Drive, Burnaby

Provides leadership in the development of Engineering and Project Delivery practices, building relationships with external institutions and organisations in technical disciplines in Engineering and Project Delivery for which they are responsible.

Oversees Engineering's technical standards and practices and their application. Provides input and advice on key issues directly related to Quality Management to other Lines of Business.

Conducts quality assurance reviews related to initiatives delivered by the Engineering group to its clients, including BC Hydro and BCTC. These reviews are identified through risk screens and occur throughout the full project and service lifecycle.

Field Operations

Strategic Asset Management

Affected Employees

Located at 10th floor - 6911 Southpoint Drive, Burnaby

The Strategic Asset Management group's activities include: monitoring system performance; planning and expanding the distribution system (including interconnections with the transmission system); determining asset management strategies; investing in maintenance and sustainment of the distribution system; Revenue Metering; and research and development. Strategic Asset Management develops strategies to manage the integrity of the distribution system to deliver long term, reliable service to customers at the least cost.

Groups within Field Operations execute all construction and maintenance orders on behalf of Asset Management, and Engineering provides study and design services.

Revenue Metering works closely with MMBU, Customer Projects, Field Operations, Engineering, BCTC, ABS, and IPPs to co-ordinate metering applications for new installations.

Construction and Transmission Services

Affected Employees

Located at various field office throughout British Columbia

Constructions Services provides a complete range of construction services and skills specializing in Electric Utility applications to BC Hydro's Key Business Units, including Field Operations, Engineering, and on occasion, BCTC.

With a construction workforce varying from 250 to 400 an assortment of skilled trade workers perform construction services in many areas. This varied expertise provides services in the following areas:

- Transportation - heavy equipment, highway work, dangerous goods
- Industrial Painting - industrial coating, sandblasting, metallizing
- Civil - Seismic upgrades, tower construction
- Electrical – generator/transformer, building, HVAC, Protection & Control repair
- Line Crews – high voltage, low voltage construction and maintenance
- Mechanical – heavy mechanical maintenance and repair, fabrication, welding
- Carpentry – custom woodwork
- Asbestos Abatement – isolation, siding

- Oil Spill Response – 24/7 Response 604-805-SPIL (7745)
- Fire Prevention – inspect, maintain, and rectify
- Training – Dangerous good, WHMIS, crane, and forklift operations

Transmission Services maintain, repair, modify, refurbish and replace transmission assets based on sound business principles. They provide a wide range of services required to operate and maintain substations, control centres and communications equipment throughout the province. Commissioning /testing services are also provided for new station equipment. Electrical testing is done on all BC Hydro and BCTC assets. Transmission Services also provides professional vegetation management services for transmission lines, contributing to a safe and reliable system, respecting the environment and optimizing program values.

Operational Support Services

Operational Support Services provides environmental services, materials management services, standards and vehicle fleet management services.

Materials Management

Support Employees

[located at 12345 - 88th Avenue, Surrey]

Materials Management provide materials forecasting, warehousing and distribution, as well as investment recovery & disposal services for BC Hydro, BCTC as well as some external organizations.

Fleet Services

Not included as Support Employees

[located at 12251 - 88th Avenue, Surrey]

Fleet Services provides all aspects of life-cycle fleet management, from specification and acquisition, through to service and end of life disposal. The fleet includes line, heavy and off-road equipment, and passenger vehicles.

Field Operations Safety, Health & Environment

Work Methods

Support Employees

[located at various locations throughout the province]

The Work Methods group provides technical trades training and safety engineering services specifically for Field Operations, including field workers and management, and periodically for other business groups such as Transmission Services. It can also include seconding some of our people to work directly with transmission crews on BCTC jobs. This includes the development and publication of utility work procedures and standards that reflect a safe work environment for all BC Hydro workers. This work is accomplished by a group of safety engineering experts, trades training instructors and professional administrative support.

Services include:

- Hazard and Risk Analysis to ensure safety is maintained
- Publication of Safety Alerts on tools, equipment and procedures that involve heightened risks
- Publication of FYI documentation that outlines current safety issues
- Publication of approved best practice Work Procedures
- Accident Investigation Services
- Field coaching for Technical and Trades Workers

- Review and approval of equipment and tools for use in the field
- Safety by Design

Environment & Social Issues

Affected Employees

[located at various locations throughout the province]

Field Operations Environmental Services provides environmental resources that support operations, maintenance and administration work for Field Operations, Engineering and BCTC. This includes social aspects of sustainability and environmental due diligence.

Procurement

Support Employees

[located at 12345 - 88th Avenue, Surrey and 11-6911 Southpoint Drive, Burnaby]

The Field Operations Procurement business unit incorporates Strategic Demand Planning, Contracts Management and Sourcing as well as Procurement of Materials and Services for BC Hydro and BCTC.

Corporate Affairs

Communications

Affected Employees

Located at 16th floor - 333 Dunsmuir Street, Vancouver and various locations in B.C.

The Communications group is primarily concerned with managing key external stakeholder relationships throughout the province, the most significant of which link to the various local governments in BC Hydro's service area. This group also provides similar services to BCTC and are Affected Employees.

The Communications group has strong operational relationships with Aboriginal Relations and Negotiations and Corporate Human Resources.

Energy Planning

Affected Employees

Located at 10th floor - 333 Dunsmuir Street, Vancouver

Energy Planning (previously part of Power Planning & Portfolio Management (P3M)) undertakes BC Hydro's long term energy planning functions to meet customer needs in conformance with provincial energy policies and stakeholder interests. Broad functions include load resource balance assessments, resource options assessments, transmission requirements, regulatory approval processes and the integration of planning functions with BC Hydro operations and BCTC, including facilitation of interconnections to the transmission grid to meet customer needs. Products produced include load and price forecast reports, the Integrated Electricity Plan, the Long Term Acquisition Plan, the Resource Options Report and coordination of the Network Integrated Transmission System agreement.

The EP group encompasses the following business departments:

- Load and Price Forecasting;
- Resource Planning;
- Generation Interconnection and Transmission issues.
- Business and Regulatory Planning

Power Acquisitions

Affected Employees

Located at 10th floor - 333 Dunsmuir Street, Vancouver

The Power Acquisitions group (previously part of Power Planning & Portfolio Management (P3M)) is responsible for the design and execution of calls, management of long-term Electricity Purchase Agreements, engagement with Independent Power Producers (IPPs), and regulatory and information management strategies related to power acquisitions.

The Power Acquisitions group's activities are focused to support a core accountability of managing the IPP supply portfolio for BC Hydro. In addition to supporting BC Hydro's business objectives, these activities are structured to meet the BC Government's Energy Plan and BCUC regulatory requirements.

Consistent with the Energy Plan, Power Acquisitions is acquiring new clean resources from Independent Power Producers, and has committed to acquire 50% of new electricity supply from BC Clean energy sources. Since 2000, energy has been acquired through competitive calls and standard contracts.