

Attraction and Retention of Distribution Engineers at BC Hydro



LIGHTING THE WAY.
FOR GENERATIONS.

IEEE PES T&D Conference and Exposition
Super Session: Overcoming the Technical Talent Challenge

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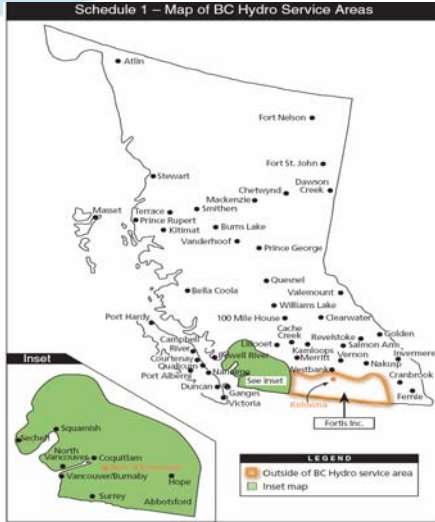
Outline

- The BC Hydro Context
- How far have we come?
- How did we get here?
 - > Relentless recruiting
 - > Attraction and retention of young engineers
 - Co-ops and EITs
 - Joint Venture with UBC
 - Real courses from power engineers
 - > Retention of our senior engineers
 - > Commitment to integration of new and foreign engineers
 - > Mentoring and training
 - > Talent management
- The obsolete perceptions of our work

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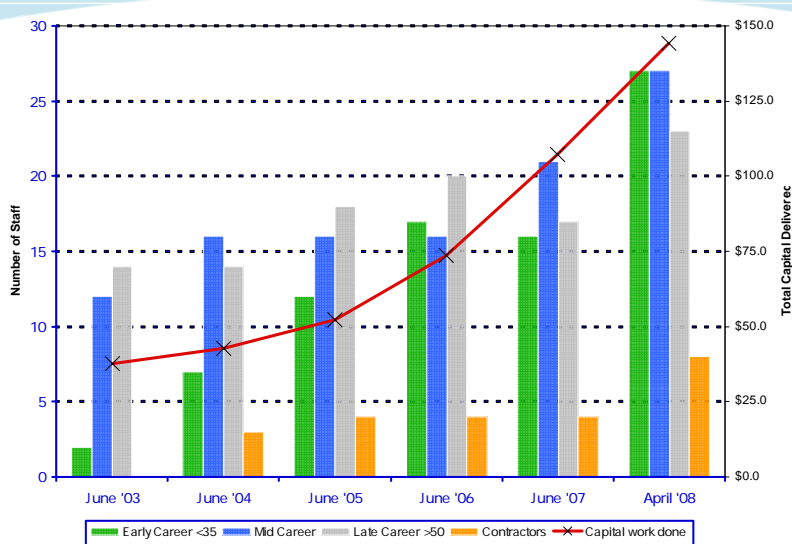
BC Hydro Overview



- Operating Area is 68,201 km²
- 1.75 million customers
- C\$4.3 billion net revenue
- 4,700 employees
- Winter peak load is 10,100 MW
- 52,900 GWhr of domestic load
- Generating capacity is 11,322 MW
- 18,336 km of transmission
- C\$5.7B of distribution assets
 - > 47,600 km of overhead distribution
 - > 8,300 km of underground distribution
 - > 400 km of distribution submarine cables
 - > 1250 feeders

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How Far Have We Come?



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How did we get here?

- Relentless recruiting
 - > Need to be on constant watch for new talent
 - > Ensure you follow every lead
 - > Don't keep it a secret; use your network
 - > Everyone says that this is a top priority, so set aside a significant portion of your time to follow up on leads, return calls, network, and interview candidates

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How did we get here?

- Attraction and retention of young engineers
 - > A steady feed of co-op and summer students, 10 to 12 per year
 - Expose a student to the power industry
 - Expose us to the student to see if they fit the organization
 - > Organized Engineer in Training program which exposes graduates to several areas of BC Hydro, and Distribution Engineering
 - Training, meaningful project and analytical work, effective mentoring
 - Hiring 4 or 5 per year in distribution, about 20 per year at BC Hydro
 - > Joint venture with University of British Columbia
 - BC Hydro committed to hiring of co-ops, a number of jobs for graduates of the power engineering program, sponsorship of research for students
 - > Courses taught by power engineers
 - Specialist engineers teach senior level courses at UBC
 - Very effective program at Hydro Quebec with Quebec universities
 - Real examples create real interest – great course at Carleton
 - Distance education – online Masters of Engineering from University of Waterloo

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How did we get here?

- Retention of senior engineers
 - > Loss of our most experienced talent leaves a huge hole since it takes two Newbies to replace one Oldie but Goody
 - > Need to provide them with opportunities to do interesting and challenging work; participate in the industry outside our utility; continued training and development
 - > Teach them how to mentor a young engineer
 - > Allow them to do the most challenging part of the work while giving the more routine aspects to a protégée
 - > Staged retirements and flexible work schedules

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How did we get here?

- Commitment to integration of foreign trained engineers
 - > In many countries utility work is viewed as very prestigious
 - > Support for recognition by the Association of Professional Engineers of British Columbia
 - > Mentoring from other senior and intermediate engineers
 - > Courses and support in adapting to a new language and culture
 - Internal course, on company time, to learn and practice areas not taught externally such as the technical language
- Diversity is a core value at BC Hydro

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How did we get here?

- Mentoring
 - > Team up one of our new employees with an experienced employee
 - Not all good engineers are good teachers
 - > Allow plenty of overlap between retirement of a senior engineer and their replacement to pass on the tacit knowledge
 - > Arrange for buddies/peers for young and foreign trained engineers
 - > Training of managers on coaching skills
- Training
 - > Formal training in power systems; have curriculum of topics
 - > Informal training, tours, sharing of knowledge amongst Newbies

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Talent Management

- Can you manage Generation Y the same as you've always managed?
 - > What do you get when you raise kids to believe they can do anything, give them all the technical gadgets to make that happen, send them off to excellent schools, and then put them in a job market where companies fight tooth and nail for the privilege of employing them?

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Talent Management

- No, you can't manage Generation Y the same as you've always managed!
 - > Individual attention and wide career opportunities are expected
 - > Want interesting and challenging work and opportunities for fast career advancement
 - > Want to connect with the people they're working with, and to connect with the business
 - > Want challenging and diverse work, meaningful training, and fun workplaces
 - > Need to listen to what they have to say since they expect to be in control of their career path, not some institutional hierarchy

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Talent Management

- Do we need to make changes to manage Generation Y?
 - > The good news is that we have no shortage of challenging and diverse work, and impending retirements mean plenty of opportunities. We're already there.
 - > Need to put to rest the obsolete HR policies that govern progression
 - > Need to take the time to listen to them and provide coaching
 - > Need to spend the time and money to train them and expose them to the industry
- So does this work for the rest of the workforce?
 - > Individual attention, meaningful training, and a fun workplaces – this works for us Boomers and Gen Xers too

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The obsolete perceptions of our work

- Outside perspective of utility work
 - > It is not very exciting
 - > We are the curators of an operating museum
- Reality is very different
 - > Tremendous pressure to update our systems to meet a rapidly changing demand in a much more challenging environment
 - > Traditional power systems and equipment work now incorporates communications, electronics hardware and software, conservation
- Can you have too many talented people?
 - > The reality is that the work to maintain and update our systems, and create new systems, is an immense task
- So get out there and tell people about it
 - > Bring students in and go out and tell them about it

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For More Information

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