2013 – 2014 Rate Increase Application

Presentation to LEC's Regulator, the City of North Vancouver
Monday September 23, 2013

www.LonsdaleEnergy.ca

1. Progress made by LEC and long-term goals

LEC 2003 - 2013

- 3 million sq. ft. connected including approximately 2,500 residential suites
- 3 heat sources: natural gas, solar, geo-exchange
- 3 service areas: Lower Lonsdale, Central Lonsdale, Marine Drive / Harbourside

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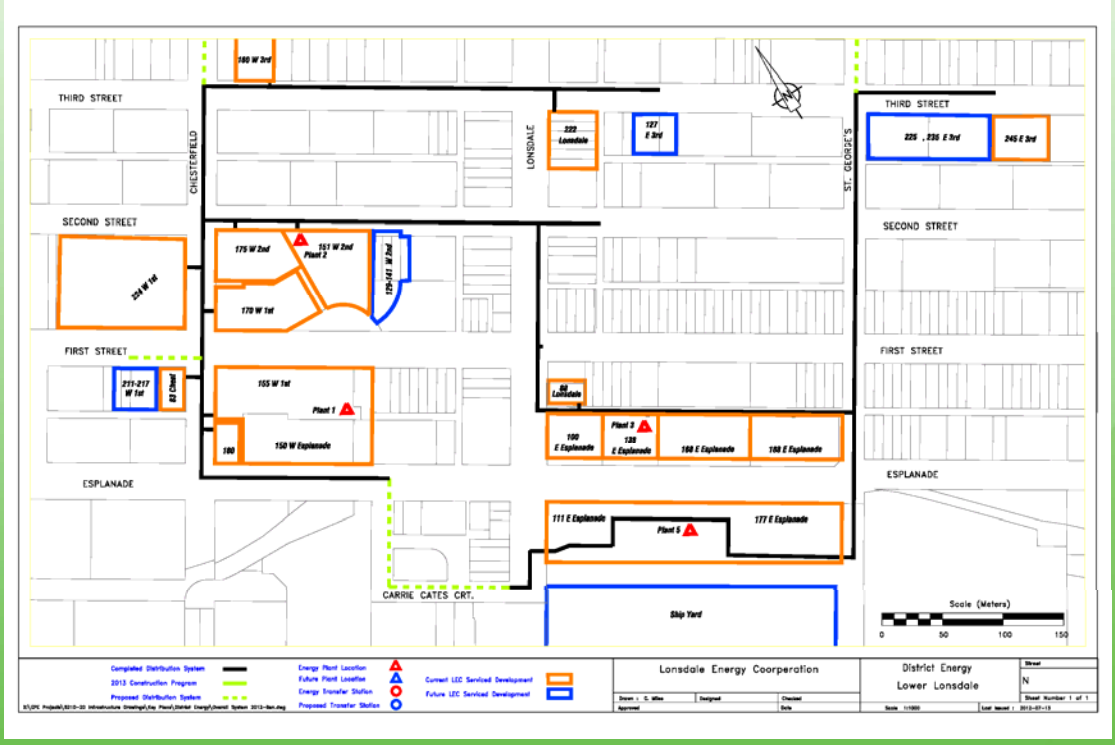

Lower Lonsdale Service Area

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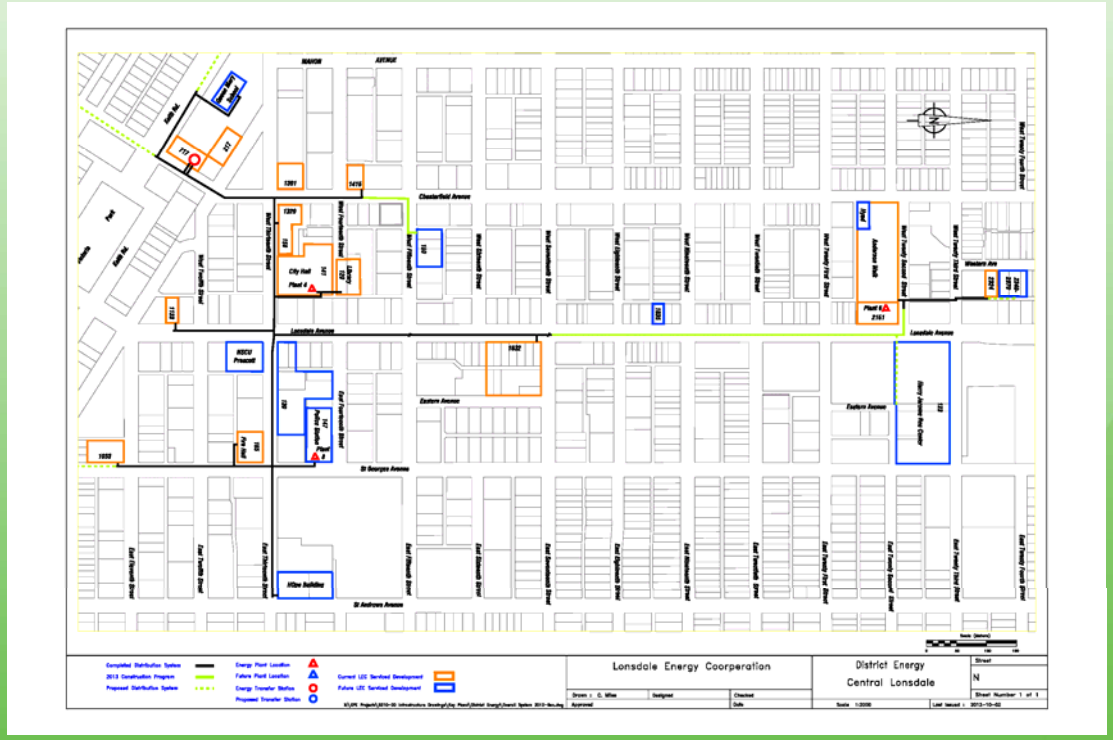

Central Lonsdale Service Area

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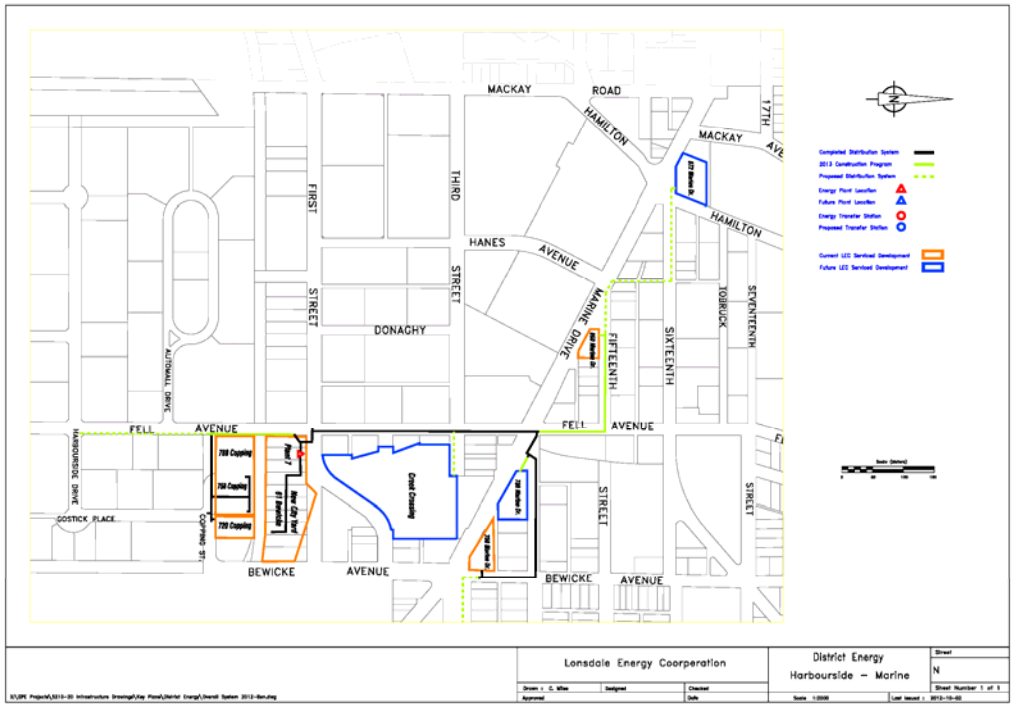

Marine Drive – Harbourside Service Area

Past, Present & Future

2003 – 2013
Establish the load and distribution system
"THE LOAD"

2014 – 2023
Investigate/Implement Alternative Energy
"THE SOURCE"

- Stop the use of electric baseboards
- Standardize & combine energy needs of the community
- Maximize the use of the distribution system's flexibility
- Diversify & use the most appropriate source of energy at all times

2014 - 2015

- Continue connection of new developments
- Focus on investigating alternative technologies
- Formulate strategy to reduce emissions
- Produce both a financial and business plan

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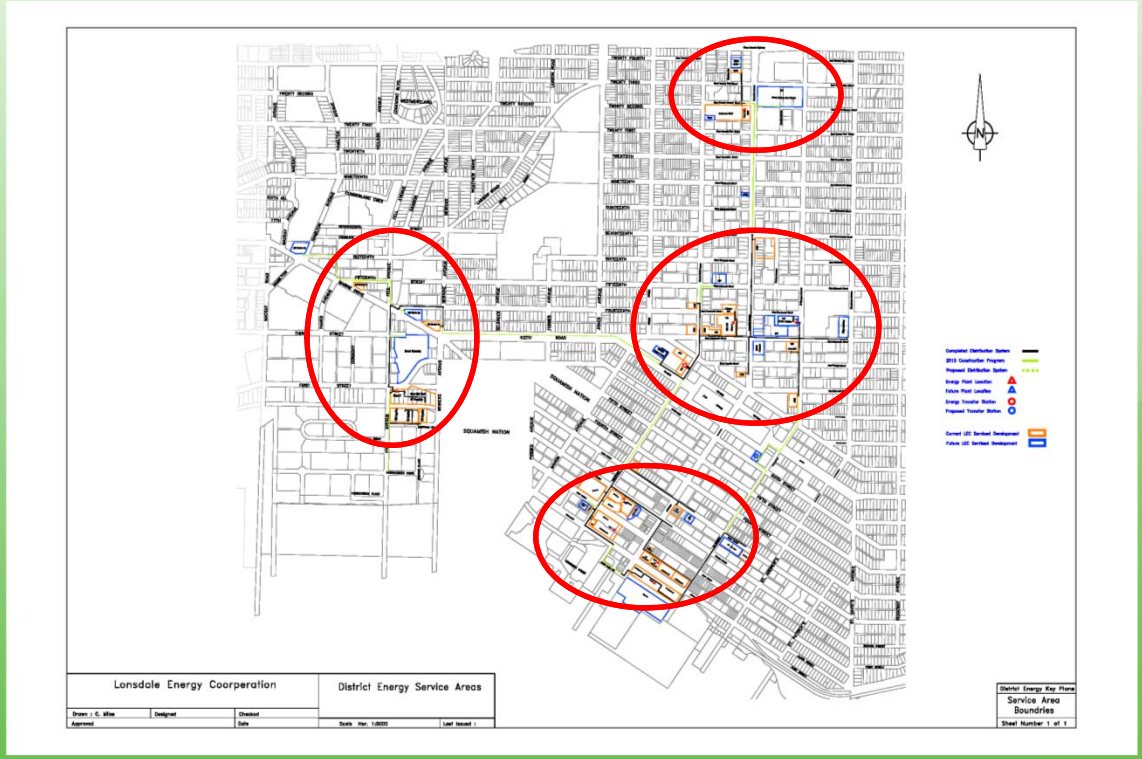

Distribution System Long-term Plan

Current Service Nodes

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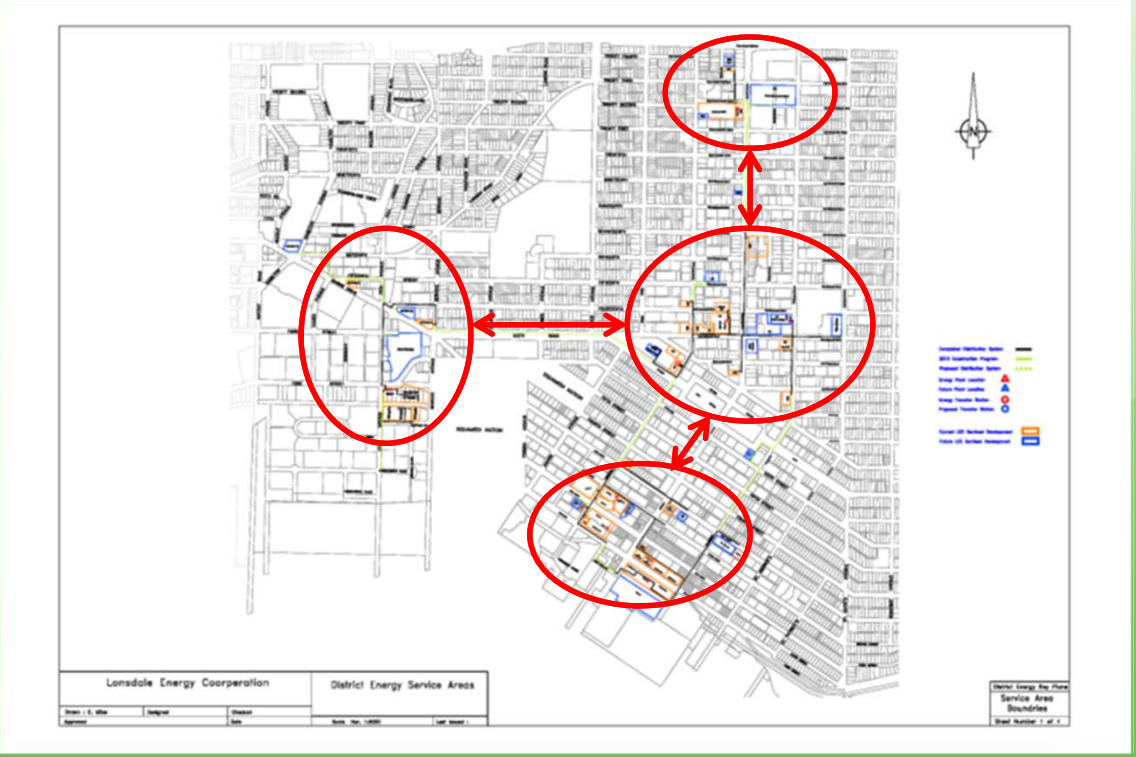
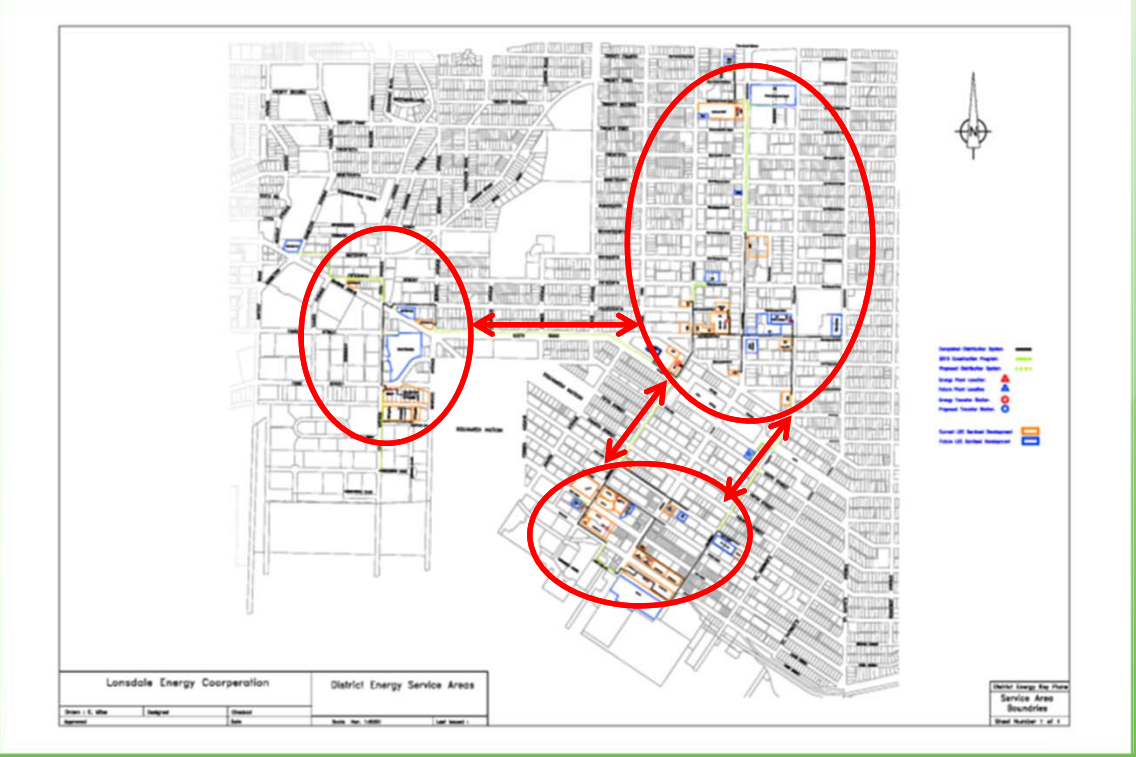


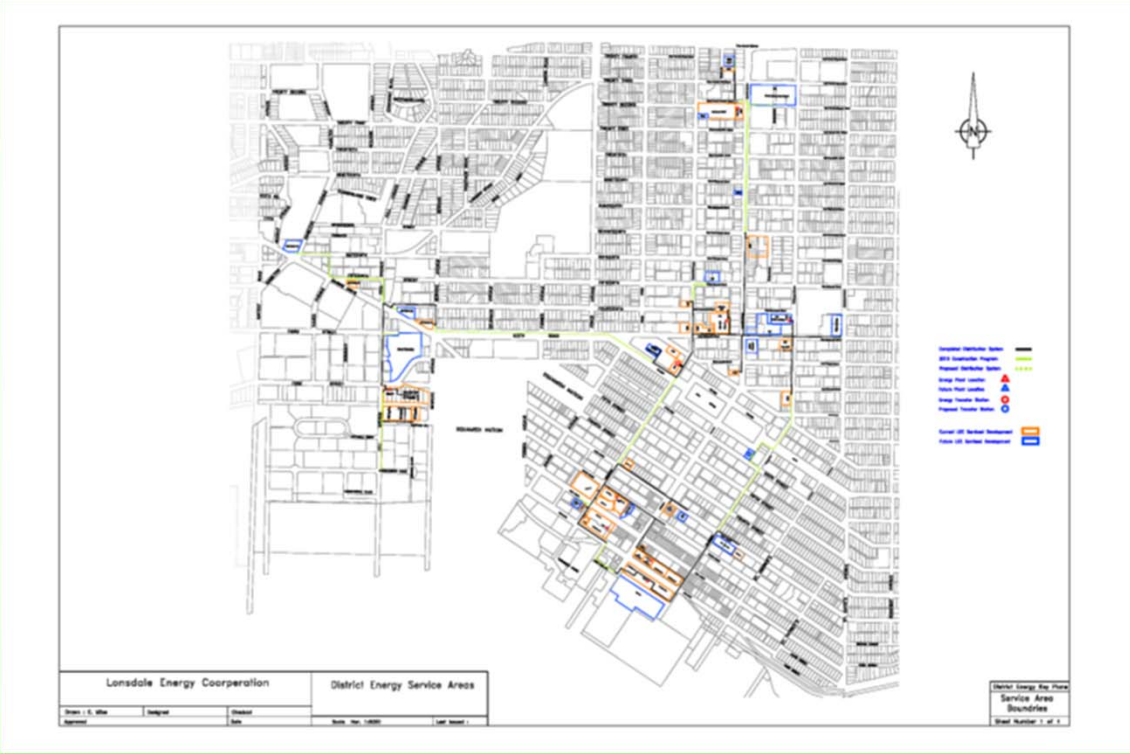
Distribution System Long-term Plan

Current Service Nodes



Distribution System Long-term Plan

End of 2013 Service Nodes



Distribution System Long-term Plan

2. Alternative Energy Sources

LEC's 120 solar panels on the roof of the City Library

Cost of Alternative Energy

- Cost charged by LEC: $70.22 per MW.hr of heat
- Cost of energy produced by solar panels on library (annual depreciation / 2012 energy produced): $211.33 per MW.hr ($45.02 per MW.hr net of grants)
- Solar energy sold to Ontario Power Authority: $443 per MW.hr

Future Energy Source Opportunities

- Biomass
- Metro Vancouver wastewater treatment plant
- Synergies and waste energy from businesses (ICBC, Lions Gate Hospital)
- Heat recovery from cooling cycle incl. geo-exchange, ocean source, etc.
- District of North Vancouver – Maplewood Flats

3. Rate Increase

Historical Rates

- Current rates have been in place since 2003
- Rates were to increase at the rate of inflation as of 2007
- Meter charge decreased in 2009 providing $55,400 in savings in 2012

Rate Increase Rationale

- Increase postponed due to:
  - Capital asset purchase deferral
  - Third party involvement limited to Lower Lonsdale
  - 2011-2012 limited LEC staffing resources
- LEC user rates are lower than other alternatives

Rate Increase Rationale (cont'd)

- LEC rate increase is to partly offset:
  - Capital cost of equipment increased over 10 years
  - Permanent staff (cost mitigated by decreasing the use of external resources)
  - New service area
  - Limited senior government grants and contributions
  - Profit to diversify energy sources or return to CNV

Proposed Rate Increase

Charge	Description	Current Rates	Proposed Bylaw	Increase (Decrease)
Meter Charge	Monthly charge for each Service Connection serving the Premises.	$150 / month	$150 / month	0.0%
Capacity Charge	Monthly charge per kilowatt multiplied by the energy capacity of the Premises in kilowatts.	$2.930 / Kw	$3.077 / Kw	5.0%
Commodity Charge	Charge per kilowatt hour of Hydronic Energy provided to the Premises.	$0.03832 / Kw.hr *	$0.03832 / Kw.hr *	0.0%

* Commodity Charge as of July 1st, 2013 is adjusted to follow Fortis BC gas pricing fluctuation.

4. Competitiveness of LEC

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Table - Comparison of LEC rate with other providers

Energy Provider	Type of Service	Year of rate	Rate ($ / MW.hr)	Difference with LEC
LEC	Hot Water	2012	$70.22	-
BC Hydro	Electricity	2013	$90.51	29%
Fortis BC	Stand-alone NG Boiler	2012	$84	20%
River District Energy (East Fraserlands)	Hot Water	2013	$96	37%
South East False Creek (SEFC)	Hot Water	2013	$94	34%
SFU UniverCity Energy	Hot Water	2013	$146	108%

LEC average rates with proposed increase:

As of October 1, 2013: $71.91 / MW.hr (2.4% increase)

As of July 1, 2014: $73.67 / MW.hr (4.9% increase)

British Columbia Utility Commission

- Exemption of services provided by municipality within its own boundaries
- Voluntary compliance potentially costly
- BCUC stated in December 2012:
  - these systems warrant "light-handed" forms of regulation
  - full cost of service regulation is the “method of last resort” … consider market-based pricing first

DE Systems Requiring Connection

Table - Summary of requirement to connect to DE system

Energy Provider	Type of Service	Requirement to Connect	Tool Used
LEC	Hot Water	Yes	Bylaw 7575
South East False Creek (SEFC)	Hot Water	Yes	City Requirement
Richmond	Ambient Loop	Yes	City Requirement
Surrey	Hot water	Yes	City Requirement
SFU UniverCity Energy	Hot Water	Yes	Land Owner
Central Heat	Steam	No	Like BC Hydro or Fortis BC
River District Energy (East Fraserlands)	Hot Water	Yes	Land Owner (Developer)

5. Next Step
Amount owed to CNV & Funding of LEC

Amount owed to CNV

- Balance as of December 31, 2012 $6,663,816
- Estimated outstanding balance as of December 31, 2013: $9-10 million
- The amount is net of $2 million equity investment and $2 million FCM/MFA loan
- The amount covers the cost of construction of distribution system since 2009 only

Amount owed to CNV (Cont'd)

- Distribution system is depreciated over 40 years
- Distribution system is the asset that is the least likely to become obsolete
- It is the backbone that allows the connection of energy sources and new customers
- Rate of construction of distribution systems and mini-plants is expected to significantly slow down in 2014

Next Step: Funding of LEC

- Need to formalize the amount due to CNV
- Review of funding scenarios
- Interest payment / recognition
- How soon does CNV want to be reimbursed?