



October 17, 2014

**ADDENDUM #3  
NWRFP-14-25  
Electrical Utility Distribution System Plan  
New Westminster, BC**

This addendum modifies the Request for Proposal only as noted:

**9.0 SCHEDULE**

**<CHANGE TO READ>**

“The Schedule for preparation of the 2016 -2021 System Plan will be developed after a review of the DSP proposal with the City of New Westminster. The proponent will require a 2-4 day site visit to develop the plan and be able to estimate the time to complete the study.”

**ADDITIONAL INFORMATION (Answers to submitted questions)**

Q1 Can we get a copy of the most recent load forecast?

A1 A copy of the most recent 5-year distribution forecast is attached. See Attachment #1 – Project Forecast Electrical Demand.

Q2 Can we get a sample of the data that CNW has for metering data for a feeder, a substation.

A2 See attached files for examples of substation demand charts and meter readings. Data for individual feeders is also attached.

Q3 Can we get an extract of a feeder, in comma delimited format, from CNW GIS system to determine the quality of the information that is in the GIS system?

A3 The City will not provide this information at this time. The GIS system can provide lists of all electrical equipment in the City in any format. Electrical equipment on the GIS is not tied to individual circuits; it is spatial only. Manually entering electrical equipment and customer-owned transformers would likely be required to create a system model in software such as CYMEDIST.

Q4 What modelling system does the City expect the electrical system to be modelled in? Is CYMEDIST acceptable?

A4 The proponent should state whether a software model is required or recommended. If the proponent must create a software model to complete the report, this must be stated in the proposal. CYMEDIST would be acceptable.

Q5 Is CIS (customer information system) monthly load data available that identifies KVA load for the top 20% of CNW customer load? Can we get a sample of that?

A5 This information is not readily available. The billing system can sort through customers by rate code, but not by installed KVA load. More detailed load data could be extracted from the billing system, but will not be provided at this time.

Q6 Please clarify that all projects from the System plan are to be scoped to +/-25%. Confirm that this includes all projects past the 5-year mark. A +/-50% estimate for plans after 5 years are typically sufficient because municipalities distribution loads can change significantly in the first 5 years.

A6 A +/-50% estimate for plans after 5 Years is acceptable. A +/- 25% estimate will still be expected for plans in the first 5 Years.

Q7 Does the CNW have planning criteria for their system? If yes, can that be provided, if no, is that an expectation of the CNW?

A7 The Utility plans and constructs according to anticipated growth and confirmed development projects. It is expected that the proponent will plan for the next 5 and 25 years, and could propose planning criteria as part of the DSP report.

Q8 Can this proposal be submitted Via e-mail? Many municipalities have been making this available in the past year. It is understood that the RFP requests a mail in. We are seeking to e-mail it.

A8 No, as per section 4.0, the City does not accept unsealed submissions.

Q9 Section 9.1 – Please clarify the need to develop a cost to complete the study as Section 10 defines that a fixed lump fee proposal is required as part of the proposal.

A9 See Page 1 of this Addendum.

Q10 When is the final report due?

A10 All work must be completed by September 2015.

Q11 Is there an existing distribution system model in CYME?

A11 No, there is currently no distribution model in CYME or other modelling software.

Q12 Is there an existing GIS of the electrical system? If yes, what is recorded in the GIS?

A12 Yes, there currently is a GIS of the electrical system. It records Circuits, Switches, Fuses, Manholes, Junction Vaults, Poles, and City-owned transformers. It also contains electrical drawings. A public version of the GIS can be found here:

<http://arcgis.newwestcity.ca/CityViewsElectrical.html>

Q13 Can we get a copy of the existing planning criteria?

A13 The Utility plans and constructs according to anticipated growth and confirmed development projects. It is expected that the proponent will plan for the next 5 and 25 years, and could propose planning criteria as part of the DSP report.

Q14 In addition to substation load data, is load data available for Feeders? Primary metered services? Large transformers ( $\geq 500\text{kVA}$ )?

A14 Load data has been provided for substations and feeders. Load data for larger loads could be extracted from the billing system, but will not be provided at this time.

Please acknowledge this addendum in your Proposal.

**END OF ADDENDUM #3**

Yours truly,



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**PROJECT FORECAST ELECTRICAL DEMAND  
CITY OF NEW WESTMINSTER**

**Updated: September 4, 2014**

<b>Project #</b>	<b>Project</b>	<b>Type of Development</b>	<b>NWR</b>	<b>RO2</b>	<b>kVA</b>	<b>Completion</b>
10	125 Columbia St.	20 storey 111 residential 9 townhouses 700 sq.ft commercial	500			2014
17	240 284 Camata St.	Port royal 2 phases 57 townhouse units	200			2014
18	100 Wood St.	36 unit townhouse development	125			2014
31	260 Ewen Ave.	2 residential units above office and retail space	100			2014
27	180 E Columbia St.	27,000 sqft commercial office and retail space	300			2014
14	250 Columbia St.	5 residential unit expansion/commercial expansion	50			2014
32	455 Brunette St.	conversion of industrial building to mini storage	50			2014
22	700 6th St.	10,000 sq.ft Rexall Drugs and 10,000 sq.ft retail space	150			2014
n/a	85 Merivale St.	Elementary School - QayQayt	100			2014
26	737 Carnarvon St.	conversion of above grade commercial to residential		100		2014
12	303-307 Jardine St.	8 unit townhouse development		25		2014
36	1135 Tanaka Court.	multi tenant industrial building		250		2014
9	777 Columbia St.	4 storey multi use civic with 8 storey office tower		1,500		2014
15	668 Columbia St.	20 storey 180 residential with 8800 sqft commercial		650		2014
1	347 Wood St.	Queensborough Temple		200		2014
28	1110 Ewen Ave.	Renovation of Queens Hotel		125		2014
		2014 Total	1,575	2,850		
		Estimated January 2015 Demand	53,175	49,050		
		Firm Substation Capacity	100,000	55,000		
		Estimated January 2015 Total City Demand	102,225		kVA	

Actual January 2014 Demand  
Firm Substation Capacity

January 2014 Total City Demand

Estimated January 2014 Total City Demand  
all numbers = kVA

Estimated January 2015 Total City Demand

\* see note #2

	<b>Project</b>	<b>Type of Development</b>	<b>NWR</b>	<b>RO2</b>	<b>Completion</b>
55	314 Agnes St.	6 storey residential 158 units	500		2015
16	295 Francis Way.	5 storey apartment 185 units	650		2015
19	22 E Royal Ave.	115 unit multi-family development	300		2015
44	36 South Dyke Rd.	10 townhouse development	50		2015
79	320 McPhaden St.	3100 sqft commercial building	50		2015
46	260-262 Salter St.	111 residential units	350		2015
43	702 Salter St.	63 unit townhouse development and heritage house		200	2015
33	845 Royal Ave.	HRA for 11 unit market rental		50	2015
n/a	120 8th St.	Middle School		100	2015
81	744 Twelfth St.	5,800 sqft commercial and 3 residential units		50	2015
	501 Boyd Phase 2	commercial warehouses		500	2015
		2015 Total	1,900	900	
		Estimated January 2016 Demand	55,075	49,950	
		Firm Substation Capacity	100,000	55,000	
		<b>Estimated January 2016 Total City Demand</b>		<b>105,025</b>	<b>kVA</b>
	<b>Project</b>	<b>Type of Development</b>	<b>NWR</b>	<b>RO2</b>	<b>Completion</b>
56	430 Boyd St.	80 unit townhouse development	225		2016
6	210 Salter St.	21 storey 163 residential units	450		2016
49	428 13th St./Cariboo	4 storey apartment with 54 units	75		2016
41	326 Hospital St.	4 unit townhouse	25		2016
20	188 Agnes St.	114 unit apartment and 7 townhouses	350		2016
54	620 Salter St.	54 unit townhouse development	200		2016
51	57 6th St.	residential highrise 282 units	750		2016
47	300 Salter St.	Port Royal phase 6 265 units	500		2016
37	275 Sherbrooke St.	office, multi-purpose room and 10 residential	100		2016
65	1016-1022 4th Ave.	10 unit townhouse development		50	2016
45	843 Ewen Ave.	68 unit townhouse development		200	2016
11	716 Columbia St.	7 residential units and commercial renovation		50	2016
35	1209-1211 4th Ave.	8 unit townhouse development		75	2016
63	501-505 Twelfth St.	multi-unit residential building		50	2016

71	728/734/746 Ewen	37 unit townhouse development			125	2016
61	240 Jardine St.	34 unit townhouse development			100	2016
70	437 Seventh St.	9700 sqft commercial building			50	2016
	501 Boyd Phase 3	commercial warehouse			500	2016
				2016 Total	2,675	1,200
				Estimated January 2017 Demand	57,750	51,150
				Firm Substation Capacity	100,000	55,000
				Estimated January 2017 Total City Demand		108,900
						kVA

	<b>Project</b>	<b>Type of Development</b>	<b>NWR</b>	<b>RO2</b>	<b>Completion</b>
21	271 Francis Way.	21 storey 232 apartments and 16 townhouses	650		2017
66	218 Carnarvon St.	6 storey 28 unit townhouse development	100		2017
n/a	835 8th St.	NW Secondary School Redevelopment	250		2017
57	813-23 Carnarvon St.	Residential highrise and commercial		750	2017
40	260 Twelfth St.	Calvary Worship Center		250	2017
50	45 & 175 Duncan St.	473 residential units		750	2017
58	402-408 8th St.	6 storey 70 units and heritage houses		200	2017
59	660 Quayside Dr.	Larco Site plan for 3 high rises and park addition Phase 1		600	2017
67	418 Thirteenth St.	13 unit stacked townhouse development		50	2017
72	129 Tenth St.	8 unit townhouse development		50	2017
73	335 Thirteenth St.	12 Secured market rentals and 8 strata titles		75	2017
76	900 Carnarvon St.	39 storey multiresidential and commercial		750	2017
77	1000 Quayside Dr.	Two 32 storey towers with 528 units and 11k sqft Comm		2,500	2017
		2017 Total	1,000	5,975	
		Estimated January 2018 Demand	58,750	57,125	
		Firm Substation Capacity	100,000	55,000	
		<b>Estimated January 2018 Total City Demand</b>		<b>115,875</b>	<b>kVA</b>
	<b>Project</b>	<b>Type of Development</b>	<b>NWR</b>	<b>RO2</b>	<b>Completion</b>
n/a	330 E Columbia St.	Royal Columbian Hospital- Acute Care Tower	3,500		2018
62	97 Braid St.	400k sq.ft 4 x 5 storey office buildings 38 acre transit Ph:1	2,000		2018
59	660 Quayside Dr.	Larco Site plan for 3 high rises and park addition Phase 2		600	2018
		2018 Total	5,500	600	
		Estimated January 2019 Demand	64,250	57,725	
		Firm Substation Capacity	100,000	55,000	
		<b>Estimated January 2019 Total City Demand</b>		<b>121,975</b>	<b>kVA</b>

	<b>Project</b>	<b>Type of Development</b>	<b>NWR</b>	<b>RO2</b>	<b>Completion</b>
62	97 Braid St.	400k sq.ft 4 x 5 storey office buildings 38 acre transit Ph:2	2,000		2019
59	660 Quayside Dr.	Larco Site plan for 3 high rises and park addition Phase 3		600	2019
		2019 Total	2,000	600	
		Estimated January 2020 Demand	66,250	58,325	
		Firm Substation Capacity	100,000	55,000	
		<b>Estimated January 2020 Total City Demand</b>		<b>124,575</b>	<b>kVA</b>

**NOTES**

1. This listing provides forecast demands from identified projects only. It does not include non-project demands such as general load growth from existing customers, additions to housing or commercial facilities or Municipal infrastructure.
2. Demand initialization is based on a actual recorded substation peaks that occurred on December 7, 2013 when a low temperature of -10° C was recorded.
3. Demands are not normalized for temperature.
4. Individual project demands may not be co-incident or affect overall City demand.
5. Maximum City demand occurs in cold weather, due to heating loads.



## The City of New Westminster New West Substation & Royal Substation Peak Demand from February 2013 to February 2014





