



**CITY OF GRAND FORKS
REQUEST FOR QUOTATION
Transformers
RFQ: UT2021-14-RFQ**

Date of Issue: September 20, 2021

Overview of Requirements

The intent of this Request for Quotation (“RFQ”) is for qualified Proponents to provide the City of Grand Forks with Quotations for Transformers.

All quotations marked “**City of Grand Forks, UT2021-14-RFQ, Confidential – Do Not Open,**” will be received by **2:00 PM PST (local time) on or before October 7, 2021** at:

Emailed to: rdykhuiizen@grandforks.ca
Subject Line: UT2021-14-RFQ Transformers

Note: Faxed submissions will **NOT** be accepted.

Schedule:

Planned Purchasing Schedule:

Issue Request for Quote	Sep 20, 2021
RFQ Closes	Oct 07, 2021
Purchase Award	Oct 21, 2021
Approval Drawings submitted to Grand Forks	Nov 04, 2021
Approval Drawings returned to Vendor	Nov 18, 2021

Submissions:

Submissions may use the supplied bid sheet herein or vendors own sheet provided all the following information is included

- Unit prices (Canadian \$) for each transformer type
- Load and No Load losses for each type
- Warranty Information
- Delivery time after receipt of approved drawings

Quotation Submissions to be provided on or before Oct 07 to:

Rosemary Dykhuizen
City of Grand Forks
Phone: 250.442.4148
Email: rdykhuizen@grandforks.ca

Questions can be submitted before Oct 01 to:

Rosemary Dykhuizen
City of Grand Forks
Phone: 250.442.4148
Email: rdykhuizen@grandforks.ca

Bid Evaluation:

Each transformer type will be individually evaluated and Grand Forks may award to multiple vendors.

Bids meeting technical specifications will be evaluated on a Total Ownership Cost basis with losses valued at:

No Load Losses = \$ 7.61/ watt

Load Losses = \$ 1.90 / watt

TOC = (Quote Price) + \$ 7.61 x (No Load Losses) + \$ 1.90 x (Load Losses)

Delivery:

All transformers to be delivered FOB to Grand Forks.

Grand Forks Transformer Specifications:

All transformers to be new product.

1. Pole Mounted Single Phase Distribution Transformers:

As per:

- CSA C2.2-06 (R2017 or newer) with attached amendments,
- CSA C802.1-13 (or newer version) Minimum Efficiency Values, &
- FOB: Grand Forks BC
- Taps: Provide voltage taps on the 7.2kV winding, 5 Pos, 95 to 105%.

kVA Rating	Primary Voltage	Secondary Voltage	Quantity Required
25	12,470GrdY/7,200	120 / 240	none
50	12,470GrdY/7,200	120 / 240	none
75	12,470GrdY/7,200	120 / 240	6
50	12,470GrdY/7,200	277 / 480Y	none
50	12,470GrdY/7,200	347 / 600Y	3
100	12,470GrdY/7,200	347 / 600Y	none

2. Pad Mounted Single Phase Distribution Transformers:

As per:

- CSA C227.3-06 (R2017 or newer) with attached amendments,
- CSA C802.1-13 (or newer version) Minimum Efficiency Values, &
- FOB: Grand Forks BC
- Taps: Provide voltage taps on the 7.2kV winding, 5 Pos, 95 to 105%.
- Loop feed terminals

kVA Rating	Primary Voltage	Secondary Voltage	Quantity Required
50	12,470GrdY/7,200	120 / 240	none
75	12,470GrdY/7,200	120 / 240	none
100	12,470GrdY/7,200	120 / 240	3

3. Pad Mounted Three Phase Distribution Transformers:

As per:

- CSA C227.4-06 (R2017 or newer) with attached amendments,
- CSA C802.1-13 (or newer version) Minimum Efficiency Values, &
- FOB: Grand Forks BC
- Taps: Provide voltage taps on the 7.2kV winding, 5 Pos, 95 to 105%.
- Loop Feed Terminals

kVA Rating	Primary Voltage	Secondary Voltage	Quantity Required
150	12,470GrdY/7,200	208Y / 120	3
300	12,470GrdY/7,200	208Y / 120	3
500	12,470GrdY/7,200	208Y / 120	none
750	12,470GrdY/7,200	208Y / 120	1
750	12,470GrdY/7,200	480Y / 277	1

Specification Amendments:

Amendments to CSA Standard C2.2-06

- Section 7, Off-circuit tap changer and voltage selector switches:
Add to 7.1: Dual primary voltage transformers shall be equipped with an external voltage-selector switch and transformers with tap changers shall be equipped with an external tap changer switch.
- Section 11, Optional Items:
Add to 11(c): Transformers rated 50 kVA or less shall be equipped with clamp-type secondary terminals. Transformers rated greater than 50 kVA shall be equipped with spade-type secondary terminals.
- New 11(q):
Transformers shall be furnished with hand wheel-type bushing covers on all high voltage insulated terminals.

Additions/Amendments to CSA Standard C227.3-06

- Section 7, Switches and tap changers:
Add to 7.1: Dual primary voltage transformers shall be equipped with an external voltage-selector switch.

Additions/Amendments to CSA Standard C227.4-06

- Section 1, Scope:
Add to 1.5: All transformers shall be radial feed unless specified otherwise.
- Section 5, Mechanical characteristics:
Add to 5.1.9: Dual primary voltage transformers shall be equipped with an external voltage-selector switch.
- Section 10, Optional Items:
Add to 10(g): Transformers with 600Y/347 secondaries shall be equipped with taps ($\pm 5\%$ in five steps), complete with an external tap selector switch.

2021 Grand Forks Distribution Transformer Bid Sheet (1/2):

kVA Rating	Primary Voltage	Secondary Voltage	Quantity Required	No Load Losses (W)	Load Losses (W)	Price Ea. (C\$)	Warranty (Years)	Delivery (Weeks)
1 Phase Pole Mount Sec 1								
75	12,470GrdY/7,200	120 / 240	6					
50	12,470GrdY/7,200	347 / 600Y	3					
1 Phase Pad Mount Sec 2								
100	12,470GrdY/7,200	120 /240	3					
3 Phase Pad Mount Sec 3								
150	12,470GrdY/7,200	208Y / 120	3					
300	12,470GrdY/7,200	208Y / 120	3					
750	12,470GrdY/7,200	208Y / 120	1					
750	12,470GrdY/7,200	480Y / 277	1					

2018 Grand Forks Distribution Transformer Bid Sheet (2/2):

Vendor Name: _____

Contact: _____

Address: _____

Position: _____

Phone: _____

e-mail: _____

Signature: _____

Date: _____

Notes: _____
