

**RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:**

**Bid Receiving
PWGSC
33 City Centre Drive
Suite 480
Mississauga
Ontario
L5B 2N5
Bid Fax: (905) 615-2095**

**REQUEST FOR PROPOSAL
DEMANDE DE PROPOSITION**

**Proposal To: Public Works and Government
Services Canada**

We hereby offer to sell to Her Majesty the Queen in right of Canada, in accordance with the terms and conditions set out herein, referred to herein or attached hereto, the goods, services, and construction listed herein and on any attached sheets at the price(s) set out therefor.

**Proposition aux: Travaux Publics et Services
Gouvernementaux Canada**

Nous offrons par la présente de vendre à Sa Majesté la Reine du chef du Canada, aux conditions énoncées ou incluses par référence dans la présente et aux annexes ci-jointes, les biens, services et construction énumérés ici sur toute feuille ci-annexée, au(x) prix indiqué(s).

Comments - Commentaires

Title - Sujet Transformers	
Solicitation No. - N° de l'invitation W0113-120171/A	Date 2013-01-24
Client Reference No. - N° de référence du client W0113-120171	
GETS Reference No. - N° de référence de SEAG PW-\$TOR-212-6176	
File No. - N° de dossier TOR-2-35238 (212)	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2013-03-06	Time Zone Fuseau horaire Eastern Standard Time EST
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input checked="" type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Shaw, Marian	Buyer Id - Id de l'acheteur tor212
Telephone No. - N° de téléphone (905) 615-2065 ()	FAX No. - N° de FAX (905) 615-2060
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: DEPARTMENT OF NATIONAL DEFENCE CFB Borden 16 Ramillies Rd - Bldg P-154 Borden Ontario L0M1C0 Canada	

Instructions: See Herein

Instructions: Voir aux présentes

Vendor/Firm Name and Address

**Raison sociale et adresse du
fournisseur/de l'entrepreneur**

Delivery Required - Livraison exigée See Herein	Delivery Offered - Livraison proposée
Vendor/Firm Name and Address Raison sociale et adresse du fournisseur/de l'entrepreneur	
Telephone No. - N° de téléphone Facsimile No. - N° de télécopieur	
Name and title of person authorized to sign on behalf of Vendor/Firm (type or print) Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)	
Signature	Date

Issuing Office - Bureau de distribution

Public Works and Government Services Canada
Ontario Region
33 City Centre Drive
Suite 480
Mississauga
Ontario
L5B 2N5

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PART 1 - GENERAL INFORMATION

1. Security Requirement

There is no security requirement associated with the requirement.

2. Requirement

The requirement is detailed under Article 2 of the resulting contract clauses.

3. Debriefings

After contract award, bidders may request a debriefing on the results of the bid solicitation process. Bidders should make the request to the Contracting Authority within 15 working days of receipt of the results of the bid solicitation process. The debriefing may be in writing, by telephone or in person.

PART 2 - BIDDER INSTRUCTIONS

1. Standard Instructions, Clauses and Conditions

All instructions, clauses and conditions identified in the bid solicitation by number, date and title are set out in the *Standard Acquisition Clauses and Conditions Manual*

(<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

Bidders who submit a bid agree to be bound by the instructions, clauses and conditions of the bid solicitation and accept the clauses and conditions of the resulting contract.

The 2003 (2012-11-19) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

Subsection 5.4 of 2003, Standard Instructions - Goods or Services - Competitive Requirements, is amended as follows:

Delete: sixty (60) days
Insert: ninety (90) days

1.1 SACC Manual Clauses

B1000T (2007-11-30) Condition of Material

2. Submission of Bids

Bids must be submitted only to Public Works and Government Services Canada (PWGSC) Bid Receiving Unit by the date, time and place indicated on page 1 of the bid solicitation.

3. Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than ten (10) calendar days before the bid closing date. Enquiries received after that time may not be answered.

Bidders should reference as accurately as possible the numbered item of the bid solicitation to which the enquiry relates. Care should be taken by bidders to explain each question in sufficient detail in order to

enable Canada to provide an accurate answer. Technical enquiries that are of a proprietary nature must be clearly marked "proprietary" at each relevant item. Items identified as "proprietary" will be treated as such except where Canada determines that the enquiry is not of a proprietary nature. Canada may edit the questions or may request that the Bidder do so, so that the proprietary nature of the question is eliminated, and the enquiry can be answered with copies to all bidders. Enquiries not submitted in a form that can be distributed to all bidders may not be answered by Canada.

4. Applicable Laws

Any resulting contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Ontario.

Bidders may, at their discretion, substitute the applicable laws of a Canadian province or territory of their choice without affecting the validity of their bid, by deleting the name of the Canadian province or territory specified and inserting the name of the Canadian province or territory of their choice. If no change is made, it acknowledges that the applicable laws specified are acceptable to the bidders.

PART 3 - BID PREPARATION INSTRUCTIONS

1. Bid Preparation Instructions

Canada requests that bidders provide their bid in separately bound sections as follows:

Section I: Technical Bid (3 hard copies)

Section II: Financial Bid (2 hard copies)

Section III: Certifications (1 hard copies)

Prices must appear in the financial bid only. No prices must be indicated in any other section of the bid.

Canada requests that bidders follow the format instructions described below in the preparation of their bid:

- (a) use 8.5 x 11 inch (216 mm x 279 mm) paper;
- (b) use a numbering system that corresponds to the bid solicitation.

In April 2006, Canada issued a policy directing federal departments and agencies to take the necessary steps to incorporate environmental considerations into the procurement process Policy on Green Procurement

(<http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policy-eng.html>). To assist Canada in reaching its objectives, bidders should:

- 1) use 8.5 x 11 inch (216 mm x 279 mm) paper containing fibre certified as originating from a sustainably-managed forest and containing minimum 30% recycled content; and
- 2) use an environmentally-preferable format including black and white printing instead of colour printing, printing double sided/duplex, using staples or clips instead of cerlox, duotangs or binders.

Section I: Technical Bid

In their technical bid, bidders should explain and demonstrate how they propose to meet the requirements and how they will carry out the Work.

Section II: Financial Bid

Bidders must submit their financial bid in accordance with the Basis of Payment. The total amount of Goods and Services Tax (GST) or Harmonized Sales Tax (HST) must be shown separately, if applicable.

Section III: Certifications

Bidders must submit the certifications required under Part 5.

PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION**1. Evaluation Procedures**

- (a) Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical and financial evaluation criteria.
- (b) An evaluation team composed of representatives of Canada will evaluate the bids.

1.1 Technical Evaluation**1.1.1 Mandatory Technical Criteria**

- a) The Bidder must meet all the technical specifications outlined in Annex A Requirement.
- b) The Bidder must submit with their bid at time of bid closing supporting technical documentation such as: product specifications and descriptive literature for their proposed product, which clearly demonstrates that their proposed product meets the technical specifications at Annex A. Bidders are encouraged to annotate their technical literature to cross reference each of the requirements of Annex A.

1.2 Financial Evaluation**1.2.1 Mandatory Financial Criteria**

The bidder must complete and submit Annex B, Basis of Payment, with their bid at time of bid closing.

1.2.2 Evaluation of Price

The evaluated price will be calculated using the Bidder's firm unit prices proposed at Annex B, Basis of Payment, multiplied by the required quantity, for the complete requirement.

- 1.2.3** The price of the bid will be evaluated in Canadian dollars, the Goods and Services Tax or the Harmonized Sales Tax excluded, FOB destination, Canadian customs duties and excise taxes included.

2. Basis of Selection**2.1 Basis of Selection - Mandatory Technical Criteria**

A bid must comply with the requirements of the bid solicitation and meet all mandatory technical evaluation criteria to be declared responsive. The responsive bid with the lowest evaluated price will be recommended for award of a contract.

PART 5 - CERTIFICATIONS

Bidders must provide the required certifications and related documentation to be awarded a contract. Canada will declare a bid non-responsive if the required certifications and related documentation are not completed and submitted as requested.

Compliance with the certifications bidders provide to Canada is subject to verification by Canada during the bid evaluation period (before award of a contract) and after award of a contract. The Contracting Authority will have the right to ask for additional information to verify bidders' compliance with the certifications before award of a contract. The bid will be declared non-responsive if any certification made by the Bidder is untrue, whether made knowingly or unknowingly. Failure to comply with the certifications, to provide the related documentation or to comply with the request of the Contracting Authority for additional information will also render the bid non-responsive.

1. Mandatory Certifications Required Precedent to Contract Award

1.1 Code of Conduct and Certifications - Related documentation

- 1.1.1** By submitting a bid, the Bidder certifies, for himself and his affiliates, to be in compliance with the Code of Conduct and Certifications clause of the Standard instructions. The related documentation hereinafter mentioned will help Canada in confirming that the certifications are true. By submitting a bid, the Bidder certifies that it is aware, and that its affiliates are aware, that Canada may request additional information, certifications, consent forms and other evidentiary elements proving identity or eligibility. Canada may also verify the information provided by the Bidder, including the information relating to the acts or convictions specified herein, through independent research, use of any government resources or by contacting third parties. Canada will declare non-responsive any bid in respect of which the information requested is missing or inaccurate, or in respect of which the information contained in the certifications is found to be untrue, in any respect, by Canada. The Bidder and any of the Bidder's affiliates, will also be required to remain free and clear of any acts or convictions specified herein during the period of any contract arising from this bid solicitation.

Bidders who are incorporated, including those bidding as a joint venture, must provide with their bid or promptly thereafter a complete list of names of all individuals who are currently directors of the Bidder. Bidders bidding as sole proprietorship, including those bidding as a joint venture, must provide the name of the owner with their bid or promptly thereafter. Bidders bidding as societies, firms, partnerships or associations of persons do not need to provide lists of names. If the required names have not been received by the time the evaluation of bids is completed, Canada will inform the Bidder of a time frame within which to provide the information. Failure to comply will render the bid non-responsive. Providing the required names is a mandatory requirement for contract award.

Canada may, at any time, request that a Bidder provide properly completed and Signed Consent Forms (Consent to a Criminal Record Verification form- PWGSC-TPSGC 229) (<http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/formulaires-forms-eng.html>) for any or all individuals aforementioned within the time specified. Failure to provide such Consent Forms within the time period provided will result in the bid being declared non-responsive.

2. Additional Certifications Precedent to Contract Award

The certifications listed below should be completed and submitted with the bid, but may be submitted afterwards. If any of these required certifications is not completed and submitted as requested, the Contracting Authority will so inform the Bidder and provide the Bidder with a time frame within which to meet the requirement. Failure to comply with the request of the Contracting Authority and meet the requirement within that time period will render the bid non-responsive.

2.1 Federal Contractors Program - Certification

Federal Contractors Program - over \$25,000 and below \$200,000

Suppliers who are subject to the Federal Contractors Program (FCP) and have been declared ineligible contractors by Human Resources and Skills Development Canada (HRSDC) are no longer eligible to receive federal government contracts over the threshold for solicitation of bids as set out in the Government Contracts Regulations. Suppliers may be declared ineligible contractors either as a result of a finding of non-compliance by HRSDC, or following their voluntary withdrawal from the FCP for a reason other than the reduction of their workforce to less than 100 employees. Any bids from ineligible contractors, including a bid from a joint venture that has a member who is an ineligible contractor, will be declared non-responsive.

The Bidder, or, if the Bidder is a joint venture the member of the joint venture, certifies its status with the FCP, as follows:

The Bidder or the member of the joint venture

- a. () is not subject to the FCP, having a workforce of less than 100 full-time or part-time permanent employees, and/or temporary employees having worked 12 weeks or more in Canada;
- b. () is not subject to the FCP, being a regulated employer under the Employment Equity Act, S.C. 1995, c. 44;
- c. () is subject to the requirements of the FCP, having a workforce of 100 or more full-time or part-time permanent employees, and/or temporary employees having worked 12 weeks or more in Canada, but has not previously obtained a certificate number from HRSDC, having not bid on requirements of \$200,000 or more;
- d. () has not been declared an ineligible contractor by HRSDC, and has a valid certificate number as follows: _____.

Further information on the FCP is available on the HRSDC Web site.

2.2 OEM Certification

- a) Any Bidder that is not the Original Equipment Manufacturer (OEM) for every item of hardware proposed as part of its bid is required to submit the OEM's certification regarding the Bidder's authority to provide and maintain the OEM's hardware, which must be signed by the OEM (not the Bidder). No Contract will be awarded to a Bidder who is not the OEM of the hardware it proposes to supply to Canada, unless the OEM certification has been provided to Canada. Bidders are requested to use the OEM Certification Form included with the bid solicitation. Although all the contents of the OEM Certification Form are required, using the form itself to provide this

information is not mandatory. For Bidders/OEMs who use an alternate form, it is in Canada's sole discretion to determine whether all the required information has been provided.

- b) If the hardware proposed by the Bidder originates with multiple OEMs, a separate OEM certification is required from each OEM.
- c) For the purposes of this bid solicitation, OEM means the manufacturer of the hardware, as evidenced by the name appearing on the hardware, on all accompanying documentation, on mandatory certification reports, and on any support software.

PART 6 - RESULTING CONTRACT CLAUSES

1. Security Requirement

There is no security requirement associated with the requirement.

2. Requirement

The Contractor must supply and deliver the Three Phase Pad Mount Transformers, 1500 KVA, 1000 KVA and 500 KVA, in accordance with the Requirement at Annex A.

3. Standard Clauses and Conditions

All clauses and conditions identified in the Contract by number, date and title are set out in the *Standard Acquisition Clauses and Conditions Manual*

(<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

3.1 General Conditions

2010A (2012-11-19), General Conditions - Goods (Medium Complexity), apply to and form part of the Contract.

4. Term of Contract

4.1 Delivery Date

All the deliverables must be received on or before 28 June 2013.

5. Authorities

5.1 Contracting Authority

The Contracting Authority for the Contract is:

Marian Shaw
Public Works and Government Services Canada
Acquisitions Branch
33 City Centre Drive, Suite 480
Mississauga, Ontario L5B 2N5
Telephone : (905) 615-2065

Facsimile: (905) 615-2060

E-mail address: marian.shaw@pwgsc-tpsgc.gc.ca

The Contracting Authority is responsible for the management of the Contract and any changes to the Contract must be authorized in writing by the Contracting Authority. The Contractor must not perform work in excess of or outside the scope of the Contract based on verbal or written requests or instructions from anybody other than the Contracting Authority.

5.2 Project Authority

The Project Authority for the Contract is:

(To be provided at contract award).

The Project Authority is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters may be discussed with the Project Authority, however the Project Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

5.3 Contractor's Representative

Name: _____

Title: _____

Telephone No. _____

Facsimile No. _____

E-mail address: _____

6. Payment

6.1 Basis of Payment - Firm Unit Price(s)

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid the firm unit price(s), as specified in Annex B for a cost of \$ _____ *(amount to be inserted at contract award)*. Customs duties are included, and Goods and Services Tax or Harmonized Sales Tax is extra, if applicable.

Canada will not pay the Contractor for any design changes, modifications or interpretations of the Work, unless they have been approved, in writing, by the Contracting Authority before their incorporation into the Work.

6.2 Limitation of Price

SACC Manual clause C6000C (2011-05-16) Limitation of Price

6.3 Single Payment

SACC Manual clause H1000C (2008-05-12) Single Payment

7. Invoicing Instructions

7.1 The Contractor must submit invoices in accordance with the section entitled "Invoice Submission" of the general conditions. Invoices cannot be submitted until all work identified in the invoice is completed.

7.2 Invoices must be distributed as follows:

- (a) The original and one (1) copy must be forwarded to the address shown on page 1 of the Contract for certification and payment.
- (b) One (1) copy must be forwarded to the Contracting Authority identified under the section entitled "Authorities" of the Contract.

8. Certifications

8.1 Compliance

Compliance with the certifications and related documentation provided by the Contractor in its bid is a condition of the Contract and subject to verification by Canada during the term of the Contract. If the Contractor does not comply with any certification, provide the related documentation or if it is determined that any certification made by the Contractor in its bid is untrue, whether made knowingly or unknowingly, Canada has the right, pursuant to the default provision of the Contract, to terminate the Contract for default.

9. Applicable Laws

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Ontario.

10. Priority of Documents

If there is a discrepancy between the wording of any documents that appear on the list, the wording of the document that first appears on the list has priority over the wording of any document that subsequently appears on the list.

- (a) the Articles of Agreement;
- (b) the general conditions 2010A (2012-11-19) General Conditions - Goods (Medium Complexity;
- (c) Annex A, Requirement,;
- (d) Annex B, Basis of Payment;
- (e) the Contractor's bid dated _____

11. SACC Manual Clauses

B1501C (2006-06-16) Electrical Equipment

G1005C (2008-05-12) Insurance

A9062C (2011-05-16) Canadian Forces Site Regulations.

A9006C (2012-07-16) Defence Contract

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Amd. No. - N° de la modif.

Buyer ID - Id de l'acheteur

tor212

Client Ref. No. - N° de réf. du client

W0113-120171

File No. - N° du dossier

TOR-2-35238

CCC No./N° CCC - FMS No/ N° VME

ANNEX A

REQUIREMENT

TRANSFORMER SPECIFICATIONS

3 Phase Pad Mount Transformers, 1500 KVA, 1000 KVA and 500 KVA

See attached document.

ANNEX B BASIS OF PAYMENT

The following are all inclusive firm unit prices in Canadian dollars. Transportation charges and Customs duties are included, F.O.B. destination including all delivery charges. The total amount of Goods and Services Tax or Harmonized Sales Tax is to be shown separately, if applicable.

Item No.	Description	Qty	Firm Unit Price	Extended Price
For the supply and delivery of 3 Phase Pad Mount Transformers as detailed below:				
001	Three Phase Pad Mount Transformer, 1500 KVA, in accordance with the specifications detailed in Annex A <u>and any other item or service required to complete the system as specified in Annex A.</u> Manufacturer: _____ Make and Model: _____	1	\$	\$
002	Three Phase Pad Mount Transformer, 1000 KVA, in accordance with the specifications detailed in Annex A <u>and any other item or service required to complete the system as specified in Annex A.</u> Manufacturer: _____ Make and Model: _____	1	\$	\$
003	Three Phase Pad Mount Transformer, 500 KVA, in accordance with the specifications detailed in Annex A <u>and any other item or service required to complete the system as specified in Annex A.</u> Manufacturer: _____ Make and Model: _____	2	\$	\$
	Sub-Total			
	GST / HST			
	Total			

Delivery Date

All the deliverables must be received on or before 28 June 2013.

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The delivery date offered is _____ (*as specified by the Bidder*) taking into account the above mandatory delivery date.

Solicitation No. - N° de l'invitation

W0113-120171/A

Amd. No. - N° de la modif.

Buyer ID - Id de l'acheteur

tor212

Client Ref. No. - N° de réf. du client

File No. - N° du dossier

CCC No./N° CCC - FMS No/ N° VME

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ANNEX C

Form 1 - OEM Certification

Form 1

OEM Certification Form

This confirms that the original equipment manufacturer (OEM) identified below has authorized the Bidder named below to provide and maintain its products under any contract resulting from the bid solicitation identified below.

Name of OEM_____

Signature of authorized signatory of OEM_____

Print Name of authorized signatory of OEM_____

Print Title of authorized signatory of OEM_____

Address for authorized signatory of OEM_____

Telephone no. for authorized signatory of OEM_____

Fax no. for authorized signatory of OEM_____

Date signed_____

Solicitation Number_____

Name of Bidder _____

3 Phase Pad Mount Transformer – Specification – 500 KVA

Equipment

1. Three phase dead front pad mounted distribution transformer to: CSA C227.4-M1978(R2005);
2. Oil filled pad mounted 5 legged core design, dead front type, distributions transformers complete with accessories to form a complete factory assembled, self-contained, steel fabricated unit for mounting on concrete box pad.
3. High voltage loadbreak bushings wells and inserts for connection to distribution system through separable insulated connectors to ANSI/IEEE 366-1984(R2001);
4. Primary feed: provide loop feed transformer;
5. Primary load break switch: 15kv, 300A, 3 phase;
6. Secondary terminations: spade type low voltage terminals;
7. Primary protection: oil immersed, dual sensing Bay-O-Net type fuses in series with current limiting fuses inside tank;
8. Stays to hold compartment doors in 110 degree open position;
9. Transformer to be filled with insulation oil by manufacturer prior to shipment; NON PCB.

Transformer Characteristics

1. Primary Voltage: 12470/7200 V, 60 Hz, wye connected, 3 phase, neutral grounded;
2. Secondary Voltage: 347/600V, wye connected, 3 phase, 4 wire, neutral grounded;
3. Capacity: 500 KVA;
4. Basic impulse level: 95 kv;
5. Impedance: 4% max.;
6. Voltage taps: Four- 2.5% voltage taps, 2 FCAN, 2 FCBN, tapchanger located in cable compartment;

Maximum Losses

1. Maximum no load and load losses to comply with standard CAN/CSA C802-94 for distribution transformers;

Accessories

1. Liquid level gauge without contacts;
2. Temperature indicator with drag hand;
3. Pressure relief device;
4. 25 mm draing valve;
5. 25 mm filler plug;
6. Drip shield on each bay-o-net.

Ground

1. Tinned copper grounding bus size 6 x 50 mm;
2. Connectors for grounding connector;

Finish

1. Paint enclosure with “equipment green” Finish for outdoor Electrical Equipment.

Equipment Identification

1. Nameplate showing information in accordance with CSA C227.4-M1978(R2005).

Warning Signs

1. Provide warning signs in accordance with CSA C2-M91(R2003).

3 Phase Pad Mount Transformer – Specification – 1000 KVA

Equipment

1. Three phase dead front pad mounted distribution transformer to: CSA C227.4-M1978(R2005);
2. Oil filled pad mounted 5 legged core design, dead front type, distributions transformers complete with accessories to form a complete factory assembled, self-contained, steel fabricated unit for mounting on concrete box pad.
3. High voltage loadbreak bushings wells and inserts for connection to distribution system through separable insulated connectors to ANSI/IEEE 366-1984(R2001);
4. Primary feed: provide loop feed transformer;
5. Primary load break switch: 15kv, 300A, 3 phase;
6. Secondary terminations: spade type low voltage terminals;
7. Primary protection: oil immersed, dual sensing Bay-O-Net type fuses in series with current limiting fuses inside tank;
8. Stays to hold compartment doors in 110 degree open position;
9. Transformer to be filled with insulation oil by manufacturer prior to shipment; NON PCB.

Transformer Characteristics

1. Primary Voltage: 12470/7200 V, 60 Hz, wye connected, 3 phase, neutral grounded;
2. Secondary Voltage: 347/600V, wye connected, 3 phase, 4 wire, neutral grounded;
3. Capacity: 1000 KVA;
4. Basic impulse level: 95 kv;
5. Impedance: 4% max.;
6. Voltage taps: Four- 2.5% voltage taps, 2 FCAN, 2 FCBN, tapchanger located in cable compartment;

Maximum Losses

1. Maximum no load and load losses to comply with standard CAN/CSA C802-94 for distribution transformers;

Accessories

1. Liquid level gauge without contacts;
2. Temperature indicator with drag hand;
3. Pressure relief device;
4. 25 mm draining valve;
5. 25 mm filler plug;
6. Drip shield on each bay-o-net.

Ground

1. Tinned copper grounding bus size 6 x 50 mm;
2. Connectors for grounding connector;

Finish

1. Paint enclosure with “equipment green” Finish for outdoor Electrical Equipment.

Equipment Identification

1. Nameplate showing information in accordance with CSA C227.4-M1978(R2005).

Warning Signs

1. Provide warning signs in accordance with CSA C2-M91(R2003).

3 Phase Pad Mount Transformer – Specification – 1500 KVA

Equipment

1. Three phase dead front pad mounted distribution transformer to: CSA C227.4-M1978(R2005);
2. Oil filled pad mounted 5 legged core design, dead front type, distributions transformers complete with accessories to form a complete factory assembled, self-contained, steel fabricated unit for mounting on concrete box pad.
3. High voltage loadbreak bushings wells and inserts for connection to distribution system through separable insulated connectors to ANSI/IEEE 366-1984(R2001);
4. Primary feed: provide loop feed transformer;
5. Primary load break switch: 15kv, 300A, 3 phase;
6. Secondary terminations: spade type low voltage terminals;
7. Primary protection: oil immersed, dual sensing Bay-O-Net type fuses in series with current limiting fuses inside tank;
8. Stays to hold compartment doors in 110 degree open position;
9. Transformer to be filled with insulation oil by manufacturer prior to shipment; NON PCB.

Transformer Characteristics

1. Primary Voltage: 12470/7200 V, 60 Hz, wye connected, 3 phase, neutral grounded;
2. Secondary Voltage: 347/600V, wye connected, 3 phase, 4 wire, neutral grounded;
3. Capacity: 1500 KVA;
4. Basic impulse level: 95 kv;
5. Impedance: 4% max.;
6. Voltage taps: Four- 2.5% voltage taps, 2 FCAN, 2 FCBN, tapchanger located in cable compartment;

Maximum Losses

1. Maximum no load and load losses to comply with standard CAN/CSA C802-94 for distribution transformers;

Accessories

1. Liquid level gauge without contacts;
2. Temperature indicator with drag hand;
3. Pressure relief device;
4. 25 mm draing valve;
5. 25 mm filler plug;
6. Drip shield on each bay-o-net.

Ground

1. Tinned copper grounding bus size 6 x 50 mm;
2. Connectors for grounding connector;

Finish

1. Paint enclosure with “equipment green” Finish for outdoor Electrical Equipment.

Equipment Identification

1. Nameplate showing information in accordance with CSA C227.4-M1978(R2005).

Warning Signs

1. Provide warning signs in accordance with CSA C2-M91(R2003).