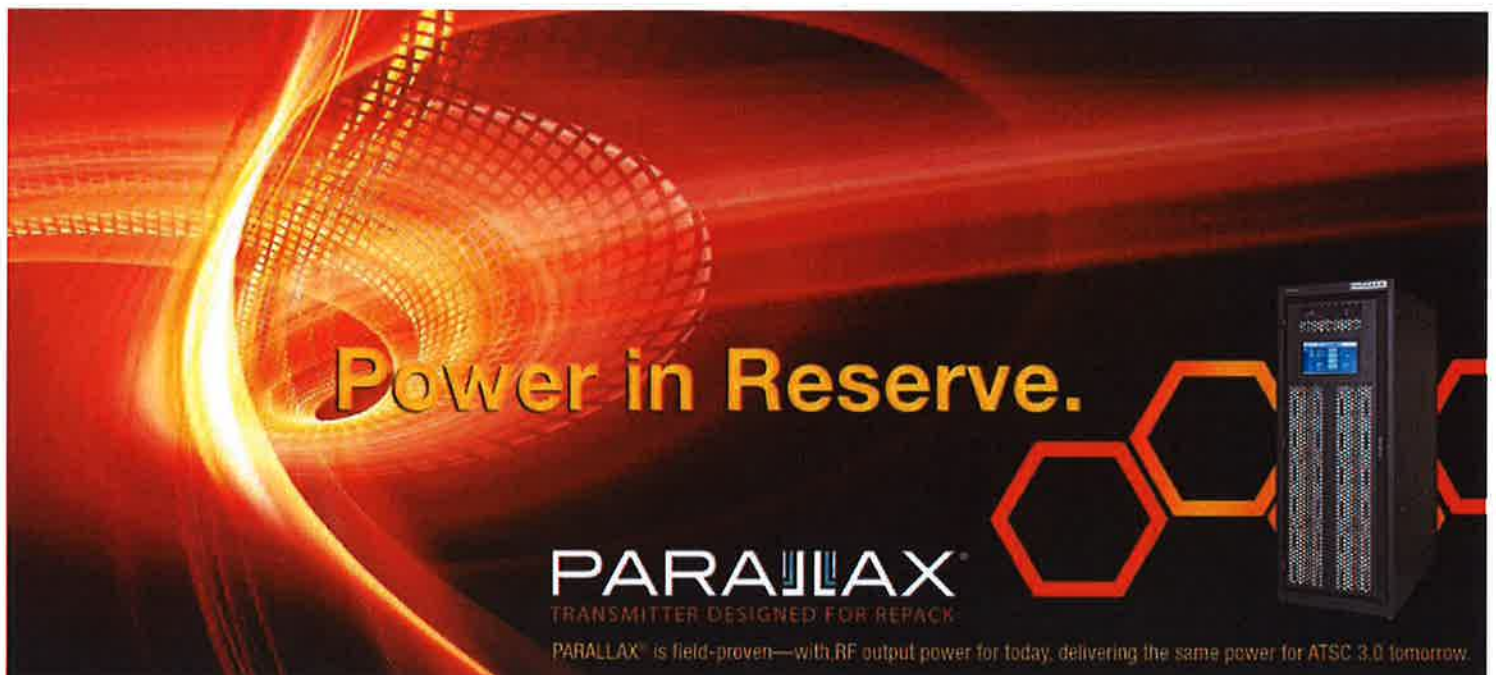


ITB Response

Prepared for: STATE OF NEBRASKA

*Customer Reference: 5970 OF REBID
13kW UHF Transmitter and Mask Filter*

*Due: December 28, 2018 2:00 PM
Hitachi-Comark Proposal # P3883-121718*



Mike Roosa
Sales Manager
Hitachi Kokusai Electric Comark LLC
Office: 413-998-1529
Mobile: 570-881-3951
Fax: 413-998-1194
mroosa@comarktv.com

Julie Dabydeen (AS)
Buyer
State Purchasing Bureau
State of Nebraska
Office: 402-471-6500
Fax: 402-471-2089
as.materielpurchasing@nebraska.gov

ITB Response

Prepared for: STATE OF NEBRASKA

*Customer Reference: 5970 OF REBID
13kW UHF Transmitter and Mask Filter*

*Due: December 28, 2018 2:00 PM
Hitachi-Comark Proposal # P3883-121718*

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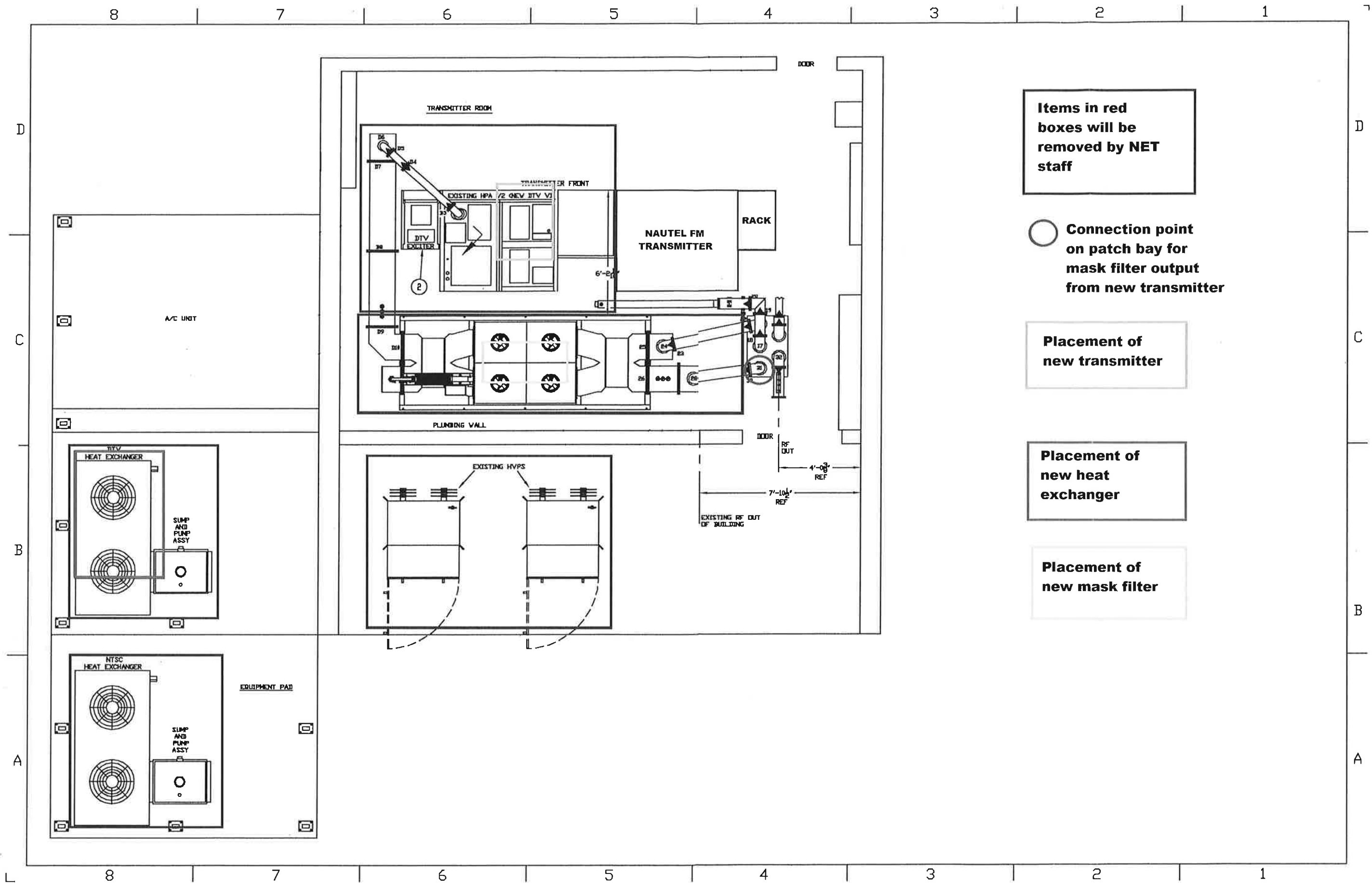
Form A
Bidder Contact Sheet
Invitation To Bid Number 5970 OF REBID

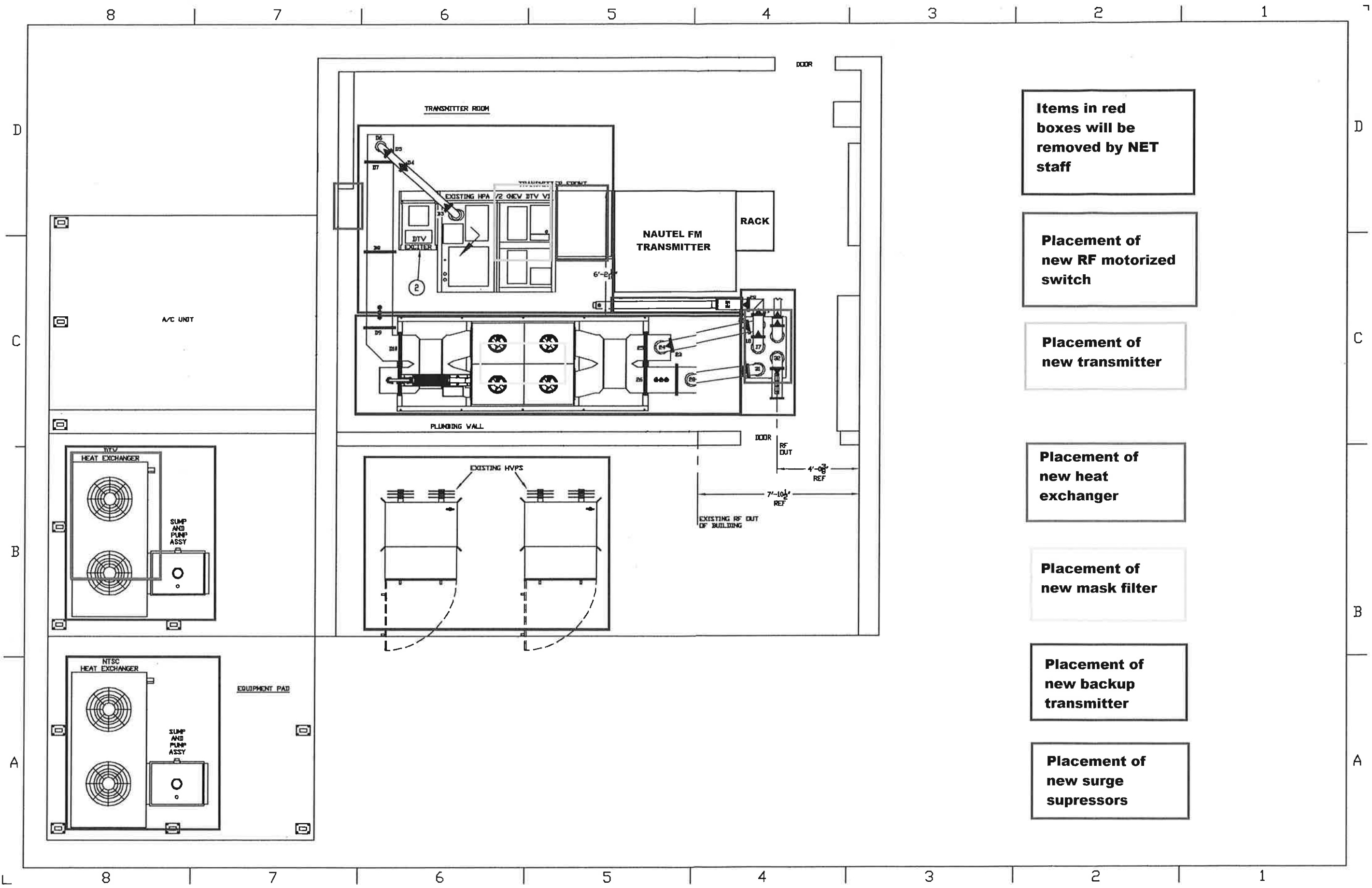
Form A should be completed and submitted with each response to this ITB. This is intended to provide the State with information on the Bidder's name and address, and the specific person(s) who are responsible for preparation of the Bidder's response.

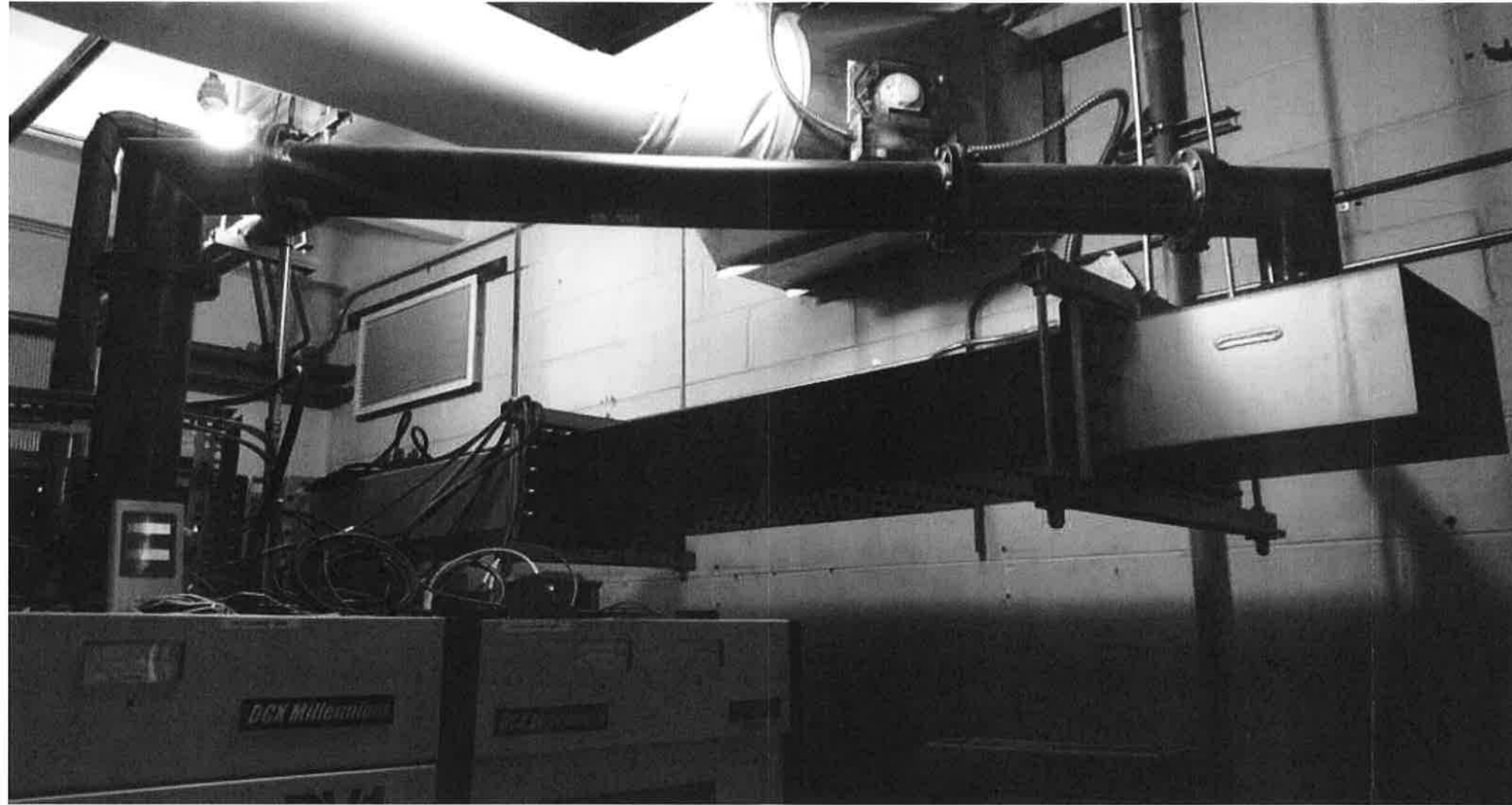
Preparation of ITB Contact Information	
Bidder Name:	HITACHI KOKUSAI ELECTRIC COMARK LLC
Bidder Address:	104 FEEDING HILLS ROAD SOUTHWICK, MA 01077
Contact Person & Title:	MICHEL ROOSA, SALES MANAGER
E-mail Address:	mroosa@comarktv.com
Telephone Number (Office):	413-998-1529
Telephone Number (Cellular):	570-881-3951
Fax Number:	413-998-1194

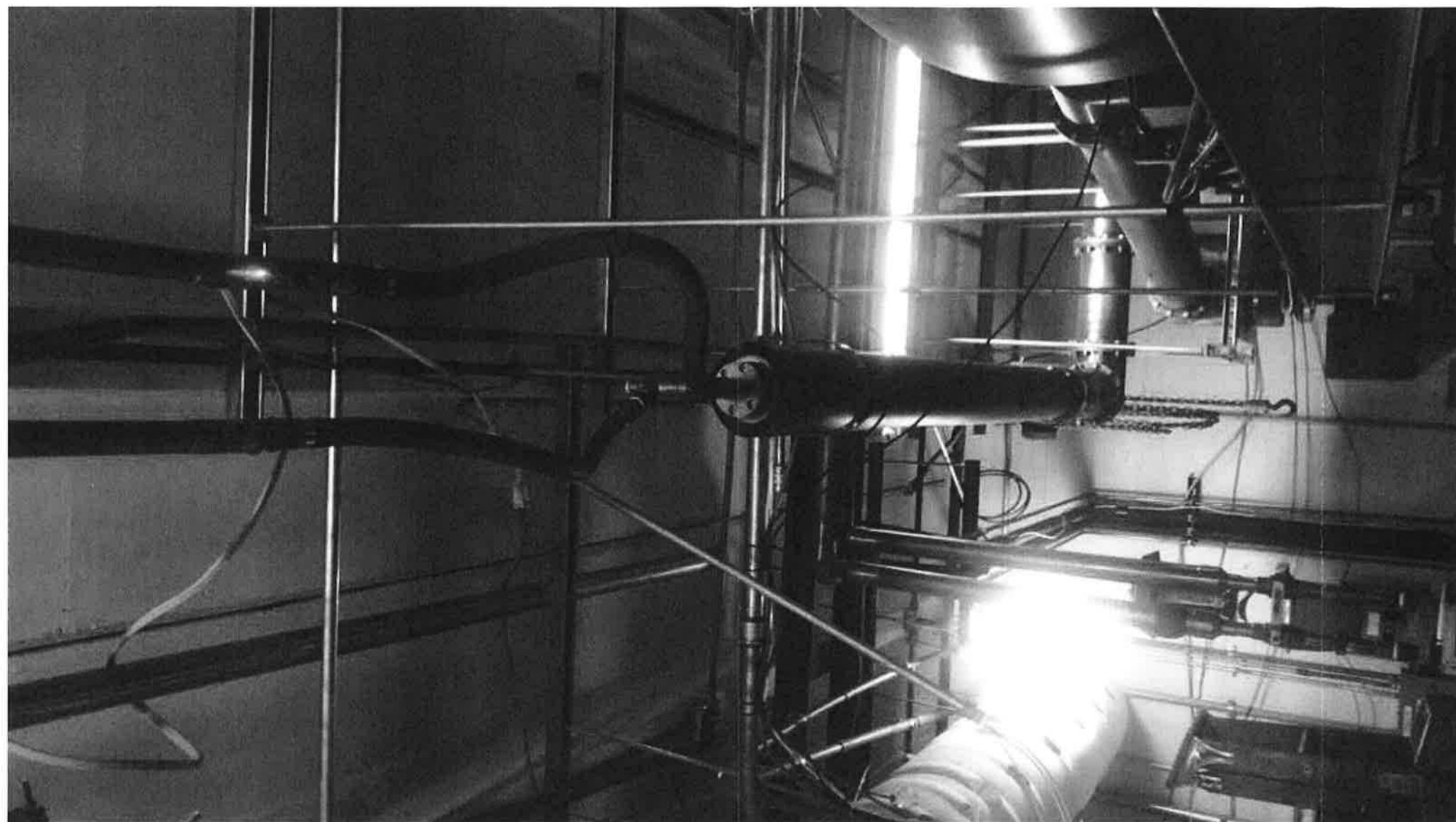
Each Bidder shall also designate a specific contact person who will be responsible for responding to the State if any clarifications of the Bidder's response should become necessary.

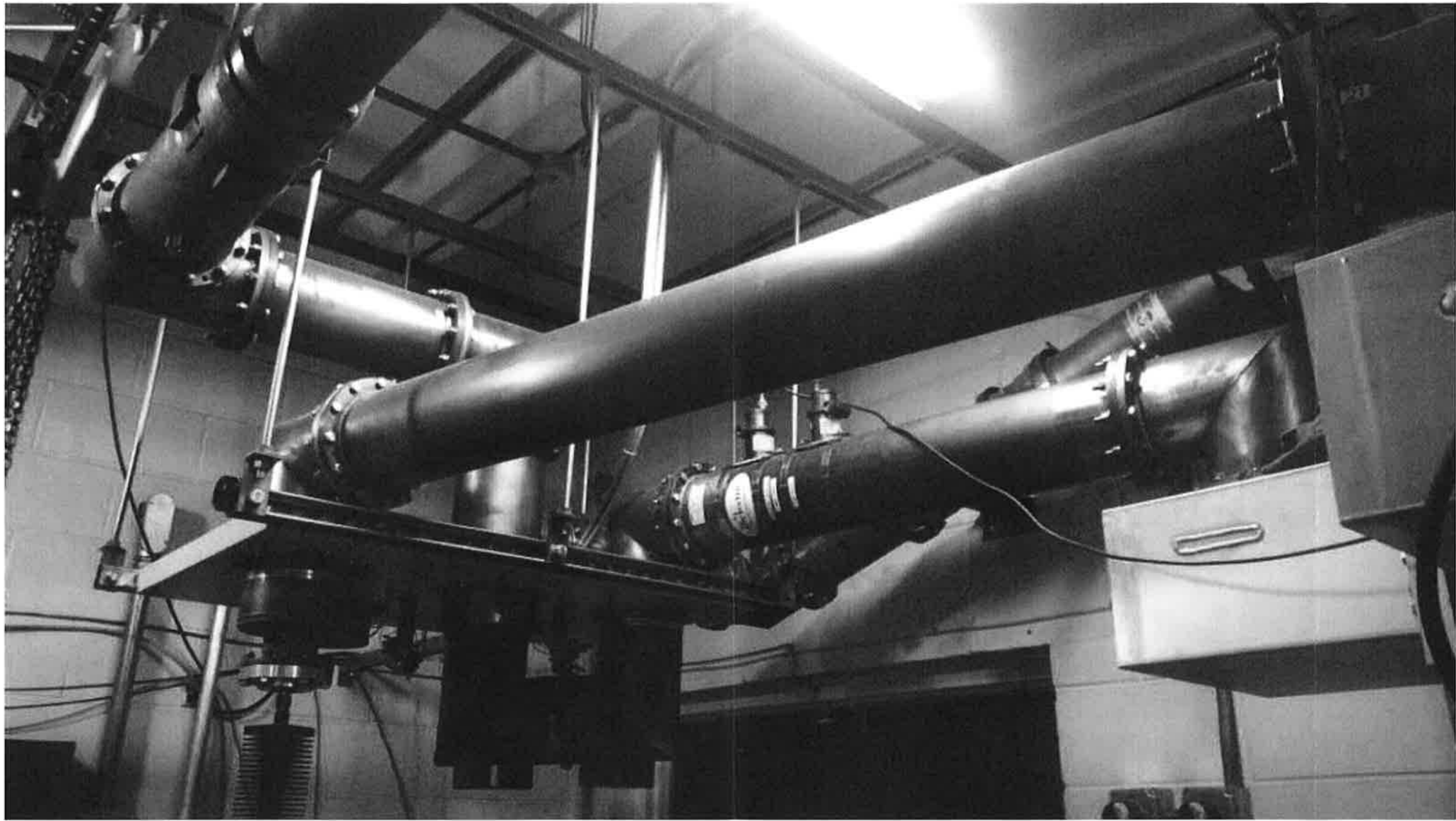
Communication with the State Contact Information	
Bidder Name:	HITACHI KOKUSAI ELECTRIC COMARK LLC
Bidder Address:	104 FEEDING HILLS ROAD SOUTHWICK, MA 01077
Contact Person & Title:	MICHAEL ROOSA, SALES MANAGER
E-mail Address:	mroosa@comarktv.com
Telephone Number (Office):	413-998-1529
Telephone Number (Cellular):	570-881-3951
Fax Number:	413-998-1194

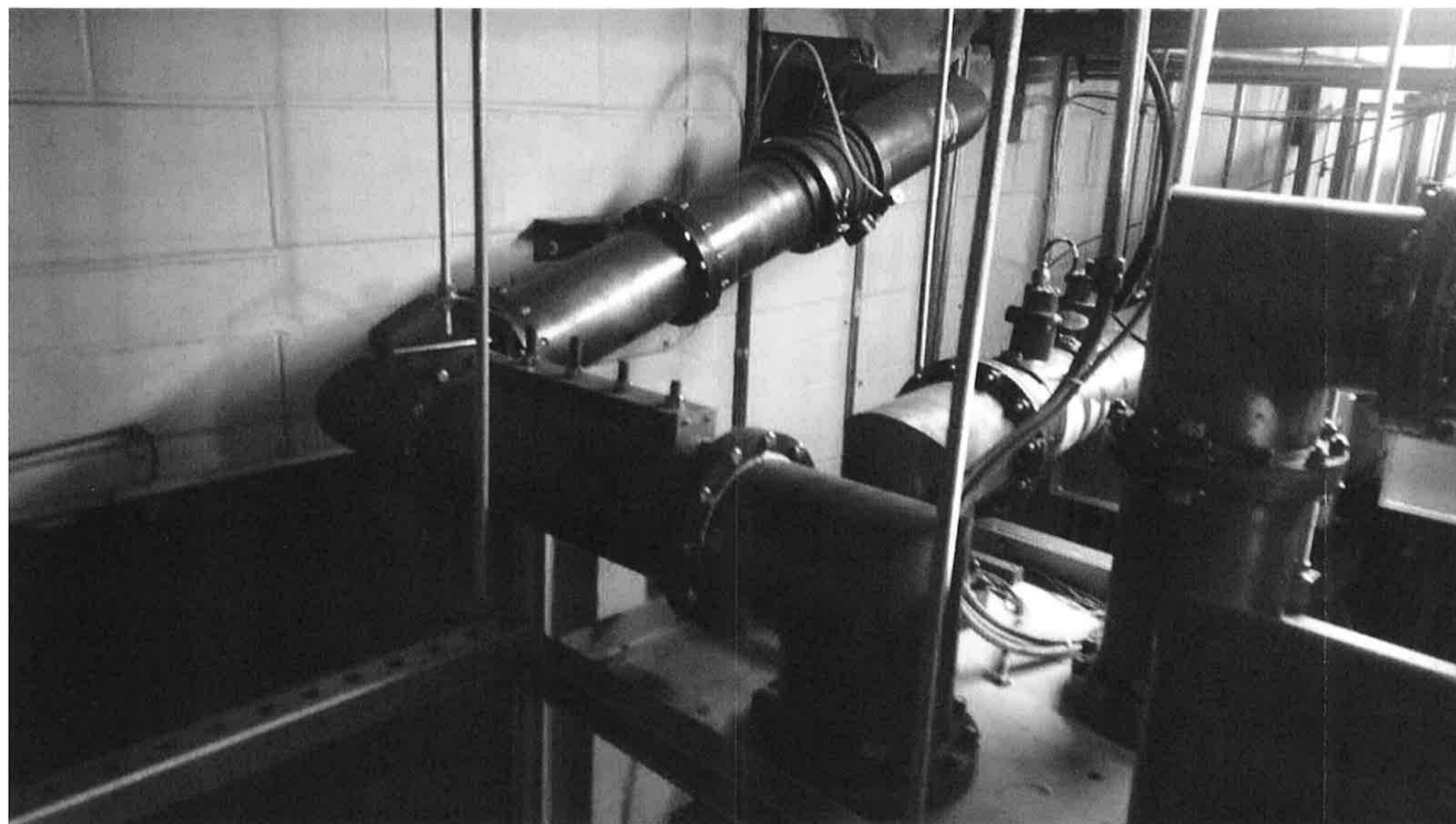


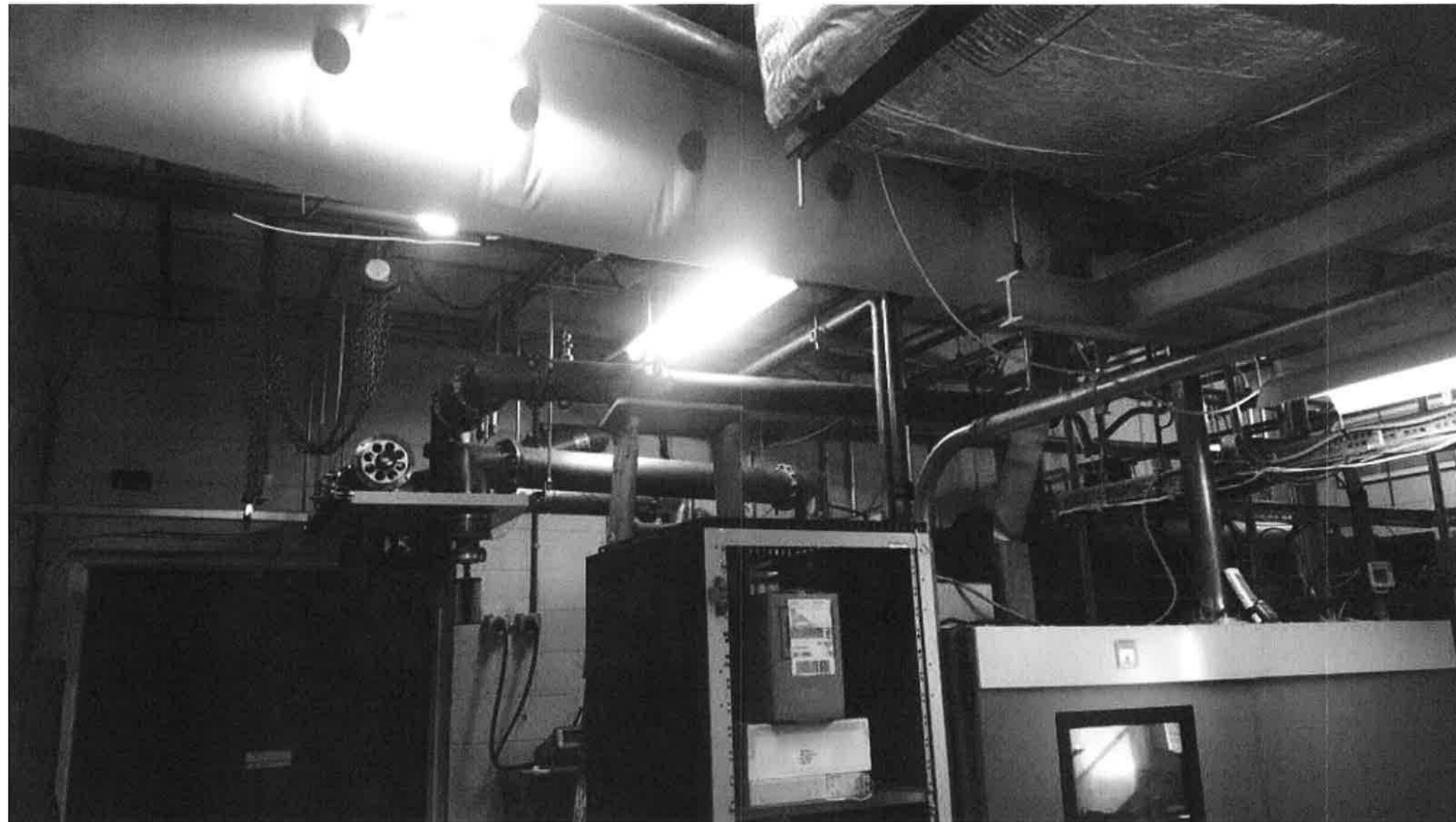


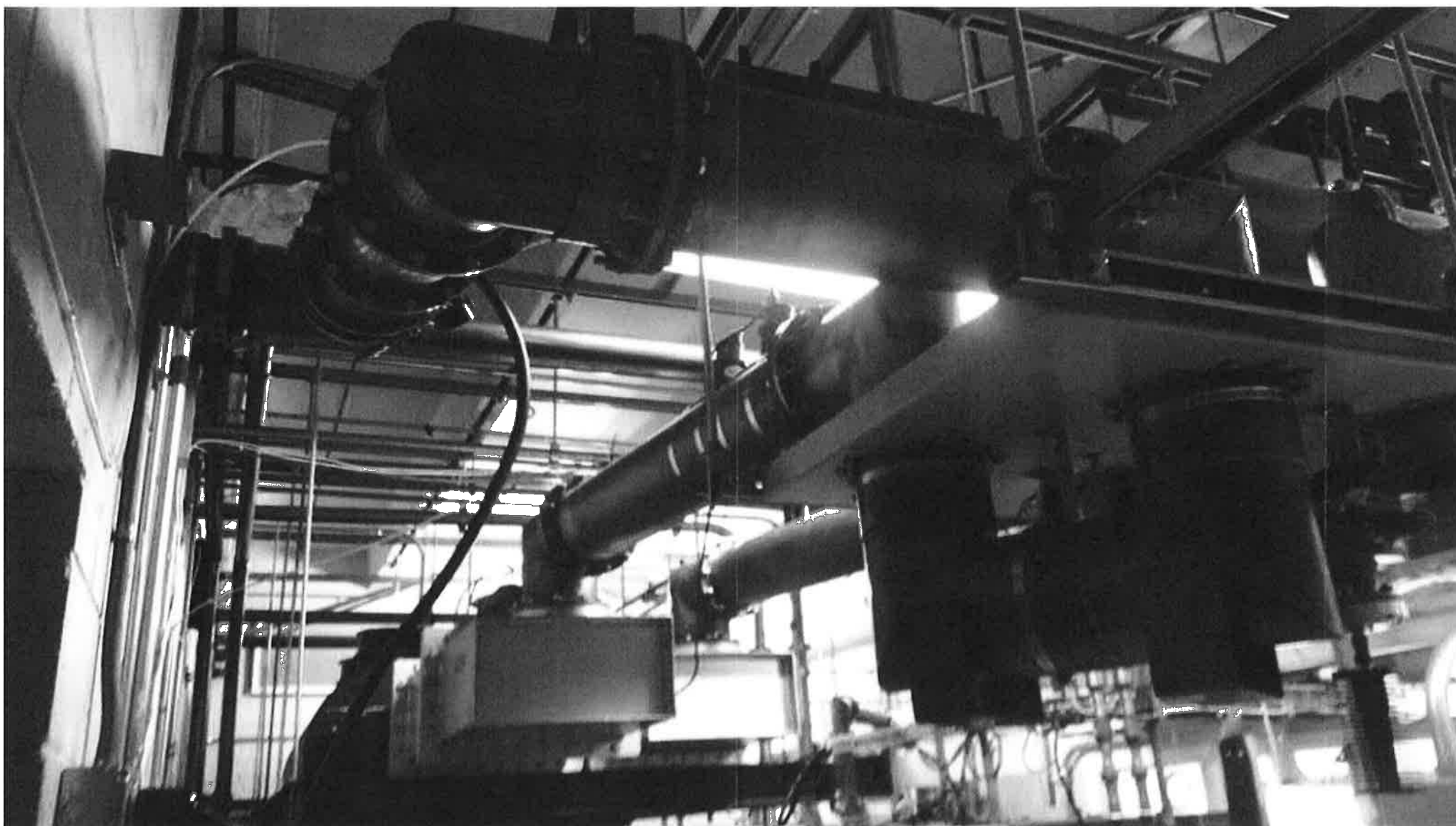














Form A
Bidder Contact Sheet
Invitation To Bid Number 5970 OF REBID

Form A should be completed and submitted with each response to this ITB. This is intended to provide the State with information on the Bidder's name and address, and the specific person(s) who are responsible for preparation of the Bidder's response.

Preparation of ITB Contact Information	
Bidder Name:	HITACHI KOKUSAI ELECTRIC COMARK LLC
Bidder Address:	104 FEEDING HILLS ROAD SOUTHWICK, MA 01077
Contact Person & Title:	MICHEL ROOSA, SALES MANAGER
E-mail Address:	mroosa@comarktv.com
Telephone Number (Office):	413-998-1529
Telephone Number (Cellular):	570-881-3951
Fax Number:	413-998-1194

Each Bidder shall also designate a specific contact person who will be responsible for responding to the State if any clarifications of the Bidder's response should become necessary.

Communication with the State Contact Information	
Bidder Name:	HITACHI KOKUSAI ELECTRIC COMARK LLC
Bidder Address:	104 FEEDING HILLS ROAD SOUTHWICK, MA 01077
Contact Person & Title:	MICHAEL ROOSA, SALES MANAGER
E-mail Address:	mroosa@comarktv.com
Telephone Number (Office):	413-998-1529
Telephone Number (Cellular):	570-881-3951
Fax Number:	413-998-1194

State of Nebraska - INVITATION TO BID

ONE TIME PURCHASE

Return to:
 State Purchasing Bureau
 1526 K Street, Suite 130
 Lincoln, Nebraska 68508

Telephone: 402-471-6500
 Fax: 402-471-2089

Date	12/14/18	Page	1 of 2
Solicitation Number	5970 OF REBID		
Opening Date and Time	12/28/18	2:00 PM	
Buyer	JULIE DABYDEEN (AS)		

DESTINATION OF GOODS
 EDUCATIONAL TELECOMM COMM
 KHNE - 1105 W 6 RD
 TO SCHEDULE DELIVERY
 CONTACT ROBERT VOS 308-991-7443
 GILTNER NE 68841-0216

Per Nebraska's Transparency in Government Procurement Act, DAS is required to collect statistical information regarding the number of contracts awarded to Nebraska contractors. This information is for statistical purposes only and will not be considered for contract award purposes.

NEBRASKA CONTRACTOR AFFIDAVIT: Bidder hereby attests that bidder is a Nebraska Contractor. "Nebraska Contractor" shall mean any bidder who has maintained a bona fide place of business and at least one employee within this state for at least the six (6) months immediately preceding the posting date of this ITB.

I hereby certify that I am a Resident disabled veteran or business located in a designated enterprise zone in accordance with Neb. Rev. Stat. §73-107 and wish to have preference, if applicable, considered in the award of this contract.

One Time Purchase to supply and deliver 13kW UHF TRANSMITTER, MASK FILTER, BACKUP TRANSMITTER, AND INSTALLATION to the State of Nebraska as per the attached specifications.

A response to this Solicitation is subject to, but not limited to, the Standard Terms and Conditions. PLEASE READ CAREFULLY!

This form is part of the specification package and must be signed and returned, along with all documents, by the opening date and time specified.

No facsimile or email solicitation responses will be accepted on bids \$25,000 and over.

(vc 11/16/18)

INVITATION

Line	Description	Quantity	Unit of Measure	Unit Price	Extended Price
1	13KW UHF TRANSMITTER WITH DUAL EXCITERS AND RF MASK FILTER	1.0000	EA	\$319,610.00	\$319,610.00
2	4 PORT RF TRANSFER SWITCH (Included in Line 1)	1.0000	EA	\$2,880.00	\$2,880.00

BIDDER MUST COMPLETE THE FOLLOWING

DISCOUNT PAYMENT TERMS: 0 % 0 DAYS

By signing this Invitation to Bid form, the bidder guarantees compliance with the provisions stated in this Invitation to Bid, agrees to the terms and conditions unless otherwise agreed to (see Section III) and certifies that bidder maintains a drug free work place environment. Vendor will furnish the items requested within ** days after receipt of order. Failure to enter Delivery Date may cause quotation to be REJECTED.

**60 days ARO for transmitters, 60-75 days for 13kW Parallax RF system due to TV repack demands.

Sign Here Joseph Moran VP OF SALES & MARKETING (Authorized Signature MANDATORY - MUST BE SIGNED IN INK)

Enter Contact Information Below

VENDOR# 10145738
 VENDOR: HITACHI KOKUSAI ELECTRIC.COMARK LLC
 Address: 104 FEEDING HILLS ROAD
SOUTHWICK, MA 0107

Contact MICHAEL ROOSA
 Telephone 413-998-1529
 Facsimile 413-998-1194
 Email mroosa@comarktv.com

State of Nebraska - INVITATION TO BID

ONE TIME PURCHASE

Return to:
 State Purchasing Bureau
 1526 K Street, Suite 130
 Lincoln, Nebraska 68508

Telephone: 402-471-6500
 Fax: 402-471-2089

Date	12/14/18	Page	2 of 2
Solicitation Number	5970 OF REBID		
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 EDUCATIONAL TELECOMM COMM
 KHNE - 1105 W 6 RD
 TO SCHEDULE DELIVERY
 CONTACT ROBERT VOS 308-991-7443
 GILTNER NE 68841-0216

INVITATION

Line	Description	Quantity	Unit of Measure	Unit Price	Extended Price
3	LIQUID COOLED DUMMY LOAD	1.0000	EA	Included	Included
4	3-PHASE SURGE SUPPRESSOR FOR 13KW TRANSMITTER	1.0000	EA	\$4,401.00	\$4,401.00
5	600-800 WATT BACK-UP TRANSMITTER WITH RF MASK FILTER	1.0000	EA	\$30,377.00	\$30,377.00
6	1-PHASE SURGE SUPPRESSOR FOR 600-800 WATT TRANSMITTER	1.0000	EA	Included	Included
7	INSTALLATION AND PROOF OF PERFORMANCE TESTING	1.0000	EA	\$43,694.00	\$43,694.00
8	DELIVERY INCLUDING ALL COSTS ASSOCIATED	1.0000	EA	\$16,303.00	\$16,303.00
					Total \$417,265.00
9	EXTRA COST PER DAY FOR STATE DELAY/ISSUES THE ONLY ADDITIONAL COST ALLOWED WOULD BE FOR DELAYS DUE TO THE STATE. BIDDER SHOULD PROVIDE A DAILY COST INCLUDING ALL PER DIEM FOR DELAYS DUE TO THE STATE OR REQUESTED BY THE STATE	1.0000	EA	\$1,500.00	\$1,500.00

INVITATION TO BID Number 5970-OF REBID

The State of Nebraska (State), Department of Administrative Services (DAS), Materiel Division, State Purchasing Bureau (SPB), is issuing this Invitation to Bid (ITB) for a one time purchase, ITB Number 5970 OF REBID for the purpose of selecting a qualified Bidder to provide 13kW UHF Transmitter, Mask Filter, Backup Transmitter, and Installation. Specifications can be found in Section VI. The resulting contract may not be an exclusive contract as the State reserves the right to contract for the same or similar goods from other sources now or in the future.

INFORMATION PERTINENT TO THIS INVITATION TO BID CAN BE FOUND ON THE INTERNET AT:
<http://das.nebraska.gov/materiel/purchasing.html>.

IMPORTANT NOTICE: Pursuant to Neb. Rev. Stat. § 84-602.04, State contracts in effect as of January 1, 2014, and contracts entered into thereafter, must be posted to a public website. The resulting contract, the ITB, and the successful Bidder's bid or response will be posted to a public website managed by DAS, which can be found at:
<https://statecontracts.nebraska.gov/>

In addition and in furtherance of the State's public records statute (Neb. Rev. Stat. § 84-712 et seq.) all bids or responses received regarding this ITB will be posted to the SPB website.

These postings will include the entire bid or response. Bidders must request that proprietary information be excluded from the posting. The Bidder must identify the proprietary information, mark the proprietary information according to state law, and submit the proprietary information in a separate container or envelope marked conspicuously using an indelible method with the words "PROPRIETARY INFORMATION". The Bidder must submit a **detailed written document showing** that the release of the proprietary information would give a business advantage to named business competitor(s) and explain how the named business competitor(s) will gain an actual business advantage by disclosure of information. The mere assertion that information is proprietary or that a speculative business advantage might be gained is not sufficient. (See Attorney General Opinion No. 92068, April 27, 1992) **THE BIDDER MAY NOT ASSERT THAT THE ENTIRE BID OR RESPONSE IS PROPRIETARY. COST WILL NOT BE CONSIDERED PROPRIETARY AND IS A PUBLIC RECORD IN THE STATE OF NEBRASKA.** The State will then determine, in its discretion, if the interests served by nondisclosure outweighs any public purpose served by disclosure. (See Neb. Rev. Stat. § 84-712.05(3)) The Bidder will be notified of the agency's decision. Absent a State determination that information is proprietary, the State will consider all information a public record subject to release regardless of any assertion that the information is proprietary.

If the agency determines it is required to release proprietary information, the Bidder will be informed. It will be the Bidder's responsibility to defend the Bidder's asserted interest in non-disclosure.

To facilitate such public postings, with the exception of proprietary information, the State of Nebraska reserves a royalty-free, nonexclusive, and irrevocable right to copy, reproduce, publish, post to a website, or otherwise use any contract, bid, or response to this ITB for any purpose, and to authorize others to use the documents. Any individual or entity awarded a contract, or who submits a bid or response to this ITB, specifically waives any copyright or other protection the contract, bid, or response to the ITB may have; and, acknowledges that they have the ability and authority to enter into such waiver. This reservation and waiver is a prerequisite for submitting a bid or response to this ITB, and award of a contract. Failure to agree to the reservation and waiver will result in the bid or response to the ITB being found non-responsive and rejected.

Any entity awarded a contract or submitting a bid or response to the ITB agrees not to sue, file a claim, or make a demand of any kind, and will indemnify and hold harmless the State and its employees, volunteers, agents, and its elected and appointed officials from and against any and all claims, liens, demands, damages, liability, actions, causes of action, losses, judgments, costs, and expenses of every nature, including investigation costs and expenses, settlement costs, and attorney fees and expenses, sustained or asserted against the State, arising out of, resulting from, or attributable to the posting of the contract or the bids and responses to the ITB, awards, and other documents.

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GLOSSARY OF TERMS

Acceptance Test Procedure: Benchmarks and other performance criteria, developed by the State or other sources of testing standards, for measuring the effectiveness of products or goods and the means used for testing such performance.

Addendum: Something to be added or deleted to an existing document; a supplement.

After Receipt of Order (ARO): After Receipt of Order

Agency: Any state agency, board, or commission other than the University of Nebraska, the Nebraska State colleges, the courts, the Legislature, or any other office or agency established by the Constitution of Nebraska.

Agent/Representative: A person authorized to act on behalf of another.

Amend: To alter or change by adding, subtracting, or substituting.

Amendment: A written correction or alteration to a document.

Appropriation: Legislative authorization to expend public funds for a specific purpose. Money set apart for a specific use.

Award: All purchases, leases, or contracts which are based on competitive bids will be awarded according to the provisions in the ITB. The State reserves the right to reject any or all bids, wholly or in part, or to award to multiple Bidders in whole or in part. The State reserves the right to waive any deviations or errors that are not material, do not invalidate the legitimacy of the bid, and do not improve the Bidder's competitive position. All awards will be made in a manner deemed in the best interest of the State.

Best and Final Offer (BAFO): In a competitive bid, the final offer submitted which contains the bidder's (vendor's) most favorable terms for price.

Bid/Proposal: The offer submitted by a vendor in a response to written solicitation.

Bid Bond: An insurance agreement, accompanied by a monetary commitment, by which a third party (the surety) accepts liability and guarantees that the vendor will not withdraw the bid.

Bidder: A vendor who submits an offer bid in response to a written solicitation.

Business: Any corporation, partnership, individual, sole proprietorship, joint-stock company, joint venture, or any other private legal entity.

Business Day: Any weekday, except State-recognized holidays.

Calendar Day: Every day shown on the calendar including Saturdays, Sundays, and State/Federal holidays.

Cancellation: To call off or revoke a purchase order without expectation of conducting or performing it at a later time.

Central Processing Unit (CPU): Any computer or computer system that is used by the State to store, process, or retrieve data or perform other functions using Operating Systems and applications software.

Change Order: Document that provides amendments to an executed purchase order.

Collusion: An agreement or cooperation between two or more persons or entities to accomplish a fraudulent, deceitful, or unlawful purpose.

Commodities: Any equipment, material, supply or goods; anything movable or tangible that is provided or sold.

Commodities Description: Detailed descriptions of the items to be purchased; may include information necessary to obtain the desired quality, type, color, size, shape, or special characteristics necessary to perform the work intended to produce the desired results.

Competition: The effort or action of two or more commercial interests to obtain the same business from third parties.

Confidential Information: Unless otherwise defined below, "Confidential Information" shall also mean proprietary trade secrets, academic and scientific research work which is in progress and unpublished, and other information which if released would give advantage to business competitors and serve no public purpose (see Neb. Rev. Stat. §84-712.05(3)). In accordance with Nebraska Attorney General Opinions 92068 and 97033, proof that information is proprietary requires identification of specific, named competitor(s) who would be advantaged by release of the information and the specific advantage the competitor(s) would receive.

Contract: An agreement between two or more parties creating obligations that are enforceable or otherwise recognizable at law; the writing that sets forth such an agreement.

Contract Administration: The management of the contract which includes and is not limited to contract signing, contract amendments and any necessary legal actions.

Contract Management: The management of day to day activities at the agency which includes and is not limited to ensuring deliverables are received, specifications are met, handling meetings and making payments to the Contractor.

Contract Period: The duration of the contract.

Contractor: Any individual or entity having a contract or awarded purchase order to furnish commodities or goods.

Cooperative Purchasing: The combining of requirements of two or more political entities to obtain advantages of volume purchases, reduction in administrative expenses or other public benefits.

Copyright: A property right in an original work of authorship fixed in any tangible medium of expression, giving the holder the exclusive right to reproduce, adapt and distribute the work.

Critical Program Error: Any Program Error, whether or not known to the State, which prohibits or significantly impairs use of the Licensed Software as set forth in the documentation and intended in the contract.

Customer Service: The process of ensuring customer satisfaction by providing assistance and advice on those products or goods provided by a Contractor.

Default: The omission or failure to perform a contractual duty.

Deviation: Any proposed change(s) or alteration(s) to either the terms and conditions or deliverables within the scope of the written solicitation or contract.

Evaluation: The process of examining an offer after opening to determine the vendor's responsibility, responsiveness to requirements, and to ascertain other characteristics of the offer that relate to determination of the successful award.

Evaluation Committee: Committee(s) appointed by the requesting agency that advises and assists the procuring office in the evaluation of bids/s (offers made in response to written solicitations).

Extension: Continuance of a contract for a specified duration upon the agreement of the parties beyond the original Contract Period. Not to be confused with "Renewal Period".

Free on Board (F.O.B.) Destination: The delivery charges are included in the quoted price and prepaid by the vendor. Vendor is responsible for all claims associated with damages during delivery of product.

Free on Board (F.O.B.) Point of Origin: The delivery charges are not included in the quoted price and are the responsibility of the agency. Agency is responsible for all claims associated with damages during delivery of product.

Foreign Corporation: A foreign corporation that was organized and chartered under the laws of another state, government, or country.

Installation Date: The date when the procedures described in "Installation by Contractor", and "Installation by State", as found in the ITB, ITB (written solicitation) or contract are completed.

Invalid Bid: i.e., a fax or email response for a term contract.

Invitation to Bid (ITB): A written solicitation utilized for obtaining competitive offers.

Late Bid: An offer received after the Opening Date and Time.

Licensed Software Documentation: The user manuals and any other materials in any form or medium customarily provided by the Contractor to the users of the Licensed Software which will provide the State with sufficient information to operate, diagnose, and maintain the Licensed Software properly, safely, and efficiently.

Mandatory/Must: Required, compulsory, or obligatory.

May: Discretionary, permitted; used to express possibility.

Module (see System): A collection of routines and data structures that perform a specific function of software.

Must: See Shall/Will/Must.

National Institute for Governmental Purchasing (NIGP): National Institute of Governmental Purchasing – Source used for assignment of universal commodity codes to goods and goods.

Open Market Purchase: Authorization may be given to an agency to purchase items above direct purchase authority due to the unique nature, price, quantity, location of the using agency, or time limitations by the AS Materiel Division, State Purchasing Bureau.

Opening Date and Time: Specified date and time for the public opening of received, labeled, and sealed formal bids.

Operating System: The control program in a computer that provides the interface to the computer hardware and peripheral devices, and the usage and allocation of memory resources, processor resources, input/output resources, and security resources.

Outsourcing: The contracting out of a business process which an organization may have previously performed internally or has a new need for, to an independent organization from which the process is purchased back.

Payroll & Financial Center (PFC): Electronic procurement system of record.

Performance Bond: An insurance agreement, accompanied by a monetary commitment, by which a third party (the surety) accepts liability and guarantees that the Contractor fulfills any and all obligations under the contract.

Platform: A specific hardware and Operating System combination that is different from other hardware and Operating System combinations to the extent that a different version of the Licensed Software product is required to execute properly in the environment established by such hardware and Operating System combination.

Point of Contact (POC): The person designated to receive communications and to communicate

Pre-Bid/Pre-Proposal Conference: A meeting scheduled for the purpose of clarifying a written solicitation and related expectations.

Product: Something that is distributed commercially for use or consumption and that is usually (1) tangible personal property, (2) the result of fabrication or processing, and (3) an item that has passed through a chain of commercial distribution before ultimate use or consumption.

Program Error: Code in Licensed Software which produces unintended results or actions, or which produces results or actions other than those described in the specifications. A program error includes, without limitation, any Critical Program Error.

Program Set: The group of programs and products, including the Licensed Software specified in the ITB, plus any additional programs and products licensed by the State under the contract for use by the State.

Project: The total scheme, program, or method worked out for the accomplishment of an objective, including all documentation, commodities, and goods to be provided under the contract.

Proposal: See Bid.

Proprietary Information: Proprietary information is defined as trade secrets, academic and scientific research work which is in progress and unpublished, and other information which if released would give advantage to business competitors and service no public purpose (see Neb. Rev. Stat. § 84-712.05(3)). In accordance with Attorney General Opinions 92068 and 97033, proof that information is proprietary requires identification of specific named competitor(s) advantaged by release of the information and the demonstrated advantage the named competitor(s) would gain by the release of information.

Protest/Grievance: A complaint about a governmental action or decision related to an ITB or resultant contract, brought by a vendor who has timely submitted a bid response in connection with the award in question, to AS Materiel Division or another designated agency with the intention of achieving a remedial result.

Public Bid Opening: The process of opening correctly submitted offers at the time and place specified in the written solicitation and in the presence of anyone who wished to attend.

Recommended Hardware Configuration: The data processing hardware (including all terminals, auxiliary storage, communication, and other peripheral devices) to the extent utilized by the State as recommended by the Contractor.

Release Date: The date of public release of the written solicitation to seek offers

Renewal Period: Optional contract periods subsequent to the original Contract Period for a specified duration with previously agreed to terms and conditions. Not to be confused with Extension.

Request for Information (RFI): A general invitation to vendors requesting information for a potential future solicitation. The RFI is typically used as a research and information gathering tool for preparation of a solicitation.

Responsible Bidder: A Bidder who has the capability in all respects to perform fully and lawfully all requirements with integrity and reliability to assure good faith performance.

Responsive Bidder: A Bidder who has submitted a bid which conforms to all requirements of the solicitation document.

Shall/Will/Must: An order/command; mandatory.

Should: Expected; suggested, but not necessarily mandatory.

Software License: Legal instrument with or without printed material that governs the use or redistribution of licensed software.

Sole Source – Commodity: When an item is available from only one source due to the unique nature of the requirement, its supplier, or market conditions.

Sole Source – Service: A service of such a unique nature that the vendor selected is clearly and justifiably the only practical source to provide the service. Determination that the vendor selected is justifiably the sole source is based on either the uniqueness of the service or sole availability at the location required.

Specifications: The detailed statement, especially of the measurements, quality, materials, and functional characteristics, or other items to be provided under a contract.

Statutory: These clauses are controlled by state law and are not subject to negotiation.

Subcontractor: Individual or entity with whom the contractor enters a contract to perform a portion of the work awarded to the contractor.

System (see Module): Any collection or aggregation of two (2) or more Modules that is designed to function, or is represented by the Contractor as functioning or being capable of functioning, as an entity.

Termination: Occurs when the contract expires or either party, pursuant to a power created by agreement or law puts an end to the contract prior to the stated expiration date. All obligations which are still executory on both sides are discharged but any right based on prior breach or performance survives.

Third-Party: Any person or entity, including but not limited to fiduciaries, shareholders, owners, officers, managers, employees, legally disinterested persons, and sub-contractors or agents, and their employees. It shall not include any entity or person who is an interested Party to the contract or agreement.

Trade Secret: Information, including, but not limited to, a drawing, formula, pattern, compilation, program, device, method, technique, code, or process that (a) derives independent economic value, actual or potential, from not being known to, and not being ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use; and (b) is the subject of efforts that are reasonable under the circumstances to maintain its secrecy (see Neb. Rev. Stat. §87-502(4)).

Trademark: A word, phrase, logo, or other graphic symbol used by a manufacturer or vendor to distinguish its product from those of others, registered with the U.S. Patent and Trademark Office.

Upgrade: Any change that improves or alters the basic function of a product of service.

Vendor: An individual or entity lawfully conducting business in the State, or licensed to do so, who seeks to provide goods or goods under the terms of a written solicitation.

Vendor Performance Report: A report issued to the Contractor by SPB when products or goods delivered or performed fail to meet the terms of the purchase order, contract, and/or specifications, as reported to SPB by the agency. The SPB shall contact the Contractor regarding any such report. The vendor performance report will become a part of the permanent record for the Contractor. The State may require vendor to cure. Two such reports may be cause for immediate termination.

Will: See Shall/Will/Must.

Work Day: See Business Day.

I. PROCUREMENT PROCEDURE

A. GENERAL INFORMATION

The ITB is designed to solicit bids from qualified Bidders who will be responsible for providing 13kW UHF Transmitter, Mask Filter, Backup Transmitter, and Installation at a competitive and reasonable cost. A detailed description can be found in Section V and VI.

Bids shall conform to all instructions, conditions, and requirements included in the ITB. Prospective Bidders are expected to carefully examine all documents, schedules, and requirements in this ITB, and respond to each requirement in the format prescribed. Bids may be found non-responsive if they do not conform to the ITB.

B. PROCURING OFFICE AND COMMUNICATION WITH STATE STAFF AND EVALUATORS

Procurement responsibilities related to this ITB reside with the SPB. The point of contact (POC) for the procurement is as follows:

Name: Julie Dabydeen
Agency: State Purchasing Bureau
Address: 1526 K Street, Suite 130
Lincoln, NE 68508
Telephone: 402-471-6500

E-Mail: as.materielpurchasing@nebraska.gov

C. COMMUNICATION WITH STATE STAFF

From the date the ITB is issued until the Intent to Award is issued communication from the Bidder is limited to communication with the State Purchasing Bureau (SPB). Only SPB is empowered to make binding statements regarding this ITB. SPB will issue any clarifications or opinions regarding this ITB in writing. Only SPB can modify the ITB, answer questions, render opinions, and only the SPB can award a contract. Bidders shall not have any communication with, or attempt to communicate or influence any evaluator involved in this ITB. After the intent to award is issued the Bidder may communicate with individuals the State has designated as responsible for negotiating the contract on behalf of the State.

The following exceptions to these restrictions are permitted:

1. Contact made pursuant to pre-existing contracts or obligations;
2. Contact required by the schedule of events or an event scheduled later by the SPB; and
3. Contact required for negotiation and execution of the final contract.

Violation of these conditions may be cause to reject a Bidder's bid and/or withdraw an Intent to Award, or terminate a contract if the State determines there has been a violation of these procurement procedures.

D. SCHEDULE OF EVENTS

The State expects to adhere to the procurement schedule shown below, but all dates are approximate and subject to change.

ACTIVITY		DATE/TIME
1.	Release Invitation To Bid	December 12, 2018
2.	Last day to submit written questions	December 19, 2018
3.	State responds to written questions through Invitation To Bid "Addendum" and/or "Amendment" to be posted to the Internet at: http://das.nebraska.gov/materiel/purchasing.html	December 21, 2018
4.	Bid opening Location: State Purchasing Bureau 1526 K Street, Suite 130 Lincoln, NE 68508	December 28, 2018 2:00 PM Central Time
5.	Review for conformance of mandatory requirements	TBD
6.	Review period	TBD
7.	Post "Letter of Intent to Award" to Internet at: http://das.nebraska.gov/materiel/purchasing.html	TBD
8.	Purchase Order finalization period	TBD
9.	Purchase Order award	TBD

E. WRITTEN QUESTIONS AND ANSWERS

Questions regarding the meaning or interpretation of any ITB provision must be submitted in writing to the SPB and clearly marked "ITB Number 5970 OF REBID; 13kW UHF Transmitter, Mask Filter, Backup Transmitter, and Installation Questions". SPB is not obligated to respond to questions that are received late per the Schedule of Events.

Bidders should present, as questions, any assumptions upon which the Bidder's bid is or might be developed. Bids will be evaluated without consideration of any known or unknown assumptions of a Bidder. The contract will not incorporate any known or unknown assumptions of a Bidder.

It is preferred that questions be sent via e-mail to as.materielpurchasing@nebraska.gov, but may be delivered by hand or by U.S. Mail. It is recommended that Bidders submit questions using the following format.

ITB Section Reference	ITB Page Number	Question

Written answers will be posted at <http://das.nebraska.gov/materiel/purchasing.html> per the Schedule of Events.

F. RECYCLING (§ 81-15,159(d)(2))

Preference will be given to items which are manufactured or produced from recycled material or which can be readily reused or recycled after their normal use. Preference will also be given to purchases of corn-based biodegradable plastics and road deicers if available and suitable. No preference shall be given if such preference would result in the purchase of products, materials, or supplies that are of inadequate quality or of substantially higher cost.

G. SECRETARY OF STATE/TAX COMMISSIONER REGISTRATION REQUIREMENTS (Statutory)

All Bidders must be authorized to transact business in the State and comply with all Nebraska Secretary of State Registration requirements. The Bidder who is the recipient of an Intent to Award will be required to certify that it has complied and produce a true and correct copy of its current (within ninety (90) calendar days of the intent to award) Certificate or Letter of Good Standing, or in the case of a sole proprietorship, provide written documentation of sole proprietorship and the United States Citizenship Attestation Form, available on the DAS website at <http://das.nebraska.gov/materiel/purchasing.html>. This must be accomplished prior to execution of the contract.

H. ETHICS IN PUBLIC CONTRACTING

The State reserves the right to reject bids, withdraw an intent to award or award, or terminate a contract if a Bidder commits or has committed ethical violations, which include, but are not limited to:

1. Offering or giving, directly or indirectly, a bribe, fee, commission, compensation, gift, gratuity, or anything of value to any person or entity in an attempt to influence the bidding process;

2. Utilize the services of lobbyists, attorneys, political activists, or consultants to influence or subvert the bidding process;
3. Being considered for, presently being, or becoming debarred, suspended, ineligible, or excluded from contracting with any state or federal entity;
4. Submitting a bid on behalf of another party or entity;
5. Collude with any person or entity to influence the bidding process, submit sham bids, preclude bidding, fix pricing or costs, create an unfair advantage, subvert the bid, or prejudice the State,

The Bidder shall include this clause in any subcontract entered into for the exclusive purpose of performing this contract.

Bidder shall have an affirmative duty to report any violations of this clause by the Bidder throughout the bidding process, and throughout the term of this contract for the successful Bidder and their subcontractors.

I. SPECIFICATIONS

Any manufacturer's names, trade names, brand names, information and/or catalog numbers listed in a specification are for reference and not intended to limit competition, but will be used as the standard by which equivalent material offered will be judged. The Materiel Administrator will be the sole judge of equivalency. The Bidder may offer any brands which meets or exceeds the specification. When a specific product is required, the ITB will so state. Any item bid is to be the latest current model under standard production at the time of order. No used or refurbished equipment will be accepted, unless otherwise stated.

J. BID PREPARATION COSTS

The State shall not incur any liability for any costs incurred by Bidders in replying to this ITB, including any activity related to bidding on this ITB.

K. DISCOUNTS

Prices quoted shall be inclusive of ALL trade discounts. Cash discount terms of less than thirty (30) days will not be considered as part of the bid. Cash discount periods will be computed from the date of receipt of a properly executed claim voucher or the date of completion of delivery of all items in a satisfactory condition, whichever is later.

L. PRICES

All prices, costs, and terms and conditions submitted in the proposal shall remain fixed and valid commencing on the opening date of the proposal until an award is made or the RFP is cancelled.

The State reserves the right to deny any requested price increase. No price increases are to be billed to any State Agencies prior to written amendment of the contract by the parties.

M. DEVIATIONS FROM THE INVITATION TO BID

The requirements contained in the ITB (Sections II and VI) become a part of the terms and conditions of the contract resulting from this ITB. Any deviations from the ITB in Section II and VI must be clearly defined by the Bidder in its bid and, if accepted by the State, will become part of the contract. Any specifically defined deviations must not be in conflict with the basic nature of the ITB, mandatory requirements, or applicable state or federal laws or statutes. "Deviation", for the purposes of this ITB, means any proposed changes or alterations to either the contractual language or deliverables within the scope of this ITB. The State discourages deviations and reserves the right to reject proposed deviations.

N. ALTERNATE/EQUIVALENT BIDS

Bidder may offer bids which are at variance from the express specifications of the ITB. The State reserves the right to consider and accept such bids if, in the judgment of the Materiel Administrator, the bid will result in goods and/or services equivalent to or better than those which would be supplied in the original bid specifications. Bidders must indicate on the ITB the manufacturer's name, number and shall submit with their bid, sketches, descriptive literature and/or complete specifications. Reference to literature submitted with a previous bid will not satisfy this provision. Bids which do not comply with these requirements are subject to rejection. In the absence of any stated deviation or exception, the bid will be accepted as in strict compliance with all terms, conditions and specification, and the Bidder shall be held liable therefore.

O. LUMP SUM OR 'ALL OR NONE' BIDS

The State reserves the right to purchase item-by-item, by groups or as a total when the State may benefit by so doing. Bidders may submit a bid on an "all or none" or "lump sum" basis, but should also submit a bid on an item-by-item basis. The term "all or none" means a conditional bid which requires the purchase of all items on which bids are offered and Bidder declines to accept award on individual items; a "lump sum" bid is one in which the Bidder offers a lower price than the sum of the individual bids if all items are purchased, but agrees to deliver individual items at the prices quoted.

P. BID REQUIREMENTS

The bids will first be examined to determine if all requirements listed below have been addressed and whether further evaluation is warranted. Bids not meeting the requirements may be rejected as non-responsive. The requirements are:

1. Original Commodity ITB form signed using an indelible method (electronic signatures are not acceptable);
2. Clarity and responsiveness of the bid;
3. Completed Sections II and VI ;
4. Completed ITB Form or State's Bid Sheet.

Q. FAILURE TO COMPLY WITH INVITATION TO BID

Violation of the terms and conditions contained in this ITB or any resultant contract, at any time before or after the award, shall be grounds for action by the State which may include, but is not limited to, the following:

1. Rejection of a Bidder's bid;
2. Withdrawal of the Intent to Award;
3. Withdrawal of the Award;
4. Termination of the resulting contract;
5. Legal action; or,
6. Suspension of the Bidder from further bidding with the State for the period of time relative to the seriousness of the violation, such period to be within the sole discretion of the State.

R. SUBMISSION OF BIDS

ALL BIDS MUST BE SUBMITTED IN A SEALED ENVELOPE OR CONTAINER!

Only one (1) original bid shall be submitted. Each bid should be in a separate envelope or container. Bid responses should include the completed Form A, "Bidder Contact Sheet". Bids must reference the ITB number and be sent to the specified address. Please note that the address label should appear as specified in Section II, Part A on the face of each container or Bidder's bid response packet. If a recipient phone number is required for delivery purposes, 402-471-6500 should be used. The ITB number must be included in all correspondence.

Emphasis should be concentrated on conformance to the ITB instructions, responsiveness to requirements, completeness, and clarity of content. If the Bidder's bid is presented in such a fashion that makes evaluation difficult or overly time consuming the State reserves the right to reject the bid as non-conforming.

Sealed bids must be received in the State Purchasing Bureau by the date and time of the bid opening per the Schedule of Events. No late bids will be accepted.

It is the responsibility of the bidder to check the website for all information relevant to this solicitation to include addenda and/or amendments issued prior to the opening date. Website address is as follows: <http://das.nebraska.gov/materiel/purchasing.html>

By signing the "ITB" form, the Bidder guarantees compliance with the provisions stated in this ITB.

S. EMAIL SUBMISSIONS

The SPB will not accept bids by email except for one-time purchases under \$50,000.00. .

T. BID CORRECTIONS

A bidder may correct a mistake in a bid prior to the time of opening by giving written notice to the State of intent to withdraw the bid for modification or to withdraw the bid completely. Changes in a bid after opening are acceptable only if the change is made to correct a minor error that does not affect price, quantity, quality, delivery, or contractual conditions. In case of a mathematical error in extension of price, unit price shall govern.

U. LATE BIDS

Bids received after the time and date of the bid opening will be considered late bids. Late bids will be returned unopened, if requested by the Bidder and at Bidder's expense. The State is not responsible for bids that are late or lost regardless of cause or fault.

V. BID OPENING

Anyone may attend the opening. It is considered a public opening. The Buyer will read the names of the respondents. Depending upon the complexity of the bid, the buyer may read the bids aloud or allow bids be available for viewing by the public during the bid opening. Once the bid opening has concluded, the bids will not be available for viewing until the Intent to Award has been posted. An initial bid tabulation will be posted to the website as soon

as feasible. Information identified as proprietary by the submitting vendor, in accordance with the RFP/ITB and state statute, will not be posted. If the state determines submitted information should not be withheld, in accordance with the Public Records Act, or if ordered to release any withheld information, said information may then be released. The submitting bidder will be notified of the release and it shall be the obligation of the submitting bidder to take further action, if it believes the information should not be released.

W. BID TABULATIONS

Bid tabulations are available on the website at: <http://www.das.state.ne.us/materiel/purchasing/bidtabs.htm>.

X. BEST AND FINAL OFFER

The State reserves the right to request Best and Final Offers. However, a Bidder should provide its best offer in its original bid. Bidders should not expect that the State will request a best and final offer.

Y. REFERENCE AND CREDIT CHECKS

The State reserves the right to conduct and consider reference and credit checks. Reference or credit checks may be grounds to reject a bid, or withdraw an intent to award or award of a contract. The State reserves the right to use third parties to conduct reference and credit checks.

Z. REJECTION OF BIDS

The State reserves the right to reject any or all bids, wholly or in part, in the best interest of the State.

AA. RESIDENT BIDDER

Pursuant to Neb. Rev. Stat. §§ 73-101.01 through 73-101.02, a Resident Bidder shall be allowed a preference against a Non-resident Bidder from a state which gives or requires a preference to Bidders from that state. The preference shall be equal to the preference given or required by the state of the Nonresident Bidders. Where the lowest responsible bid from a resident Bidder is equal in all respects to one from a nonresident Bidder from a state which has no preference law, the resident Bidder shall be awarded the contract. The provision of this preference shall not apply to any contract for any project upon which federal funds would be withheld because of the provisions of this preference.

BB. AWARD

All purchases, leases, or contracts which are based on competitive bids will be awarded according to the provisions in the ITB. The State reserves the right to reject any or all bids, in whole or in part, or to award to multiple Bidders in whole or in part, and at its discretion, may withdraw or amend the ITB at any time. The State reserves the right to waive any deviations or errors that are not material, do not invalidate the legitimacy of the bid, and do not improve the Bidder's competitive position. All awards will be made in a manner deemed in the best interest of the State. The ITB does not commit the State to award a contract. If, in the opinion of the State, revisions or amendments will require substantive changes in bids, the bid opening date may be extended.

By submitting a bid in response to this ITB, the Bidder grants to the State the right to contact or arrange a visit in person with any or all of the Bidder's clients.

Once the Intent to Award decision has been made, an Intent to Award will be posted to the Internet at: <http://das.nebraska.gov/materiel/purchasing.html>

The protest procedure is available on the Internet at: [http://das.nebraska.gov/materiel/purchase_bureau/docs/vendors/protest/ProtestGrievanceProcedureForVendors%20\(2\).pdf](http://das.nebraska.gov/materiel/purchase_bureau/docs/vendors/protest/ProtestGrievanceProcedureForVendors%20(2).pdf)

Any protests must be filed by a vendor within ten (10) business days after the Intent to Award is posted to the Internet.

The State reserves the right to award contracts in a manner, and utilizing methods, selected in the State's best interest and discretion. The State may waive informalities or irregularities in bids if the waiver is in the best interest of the State and such waiver does not prejudice other Bidders in the State's discretion. After evaluation of the bids, the State may take, in the State's discretion, one or more of the following actions:

- Accept or reject a portion of or all of a bid;
- Accept or reject all bids;
- Withdraw the ITB;
- Elect to rebid the ITB;
- Award single lines or multiple lines to one or more Bidders; or,
- Award one or more complete contracts.

The State reserves the right to make awards that are in the best interest of the State to include but not limited to the factors found in Neb. Rev. Stat. §81-161.

The State may also consider, but is not limited to, one (1) or more of the following award criteria:

Price;
Location;
Quality;
Delivery time; and,
State contract management requirements and/or costs.

II. TERMS AND CONDITIONS

Bidders should complete Section II through IV as part of their bid. Bidder is expected to read the Terms and Conditions and must initial either accept, reject, or reject and provide alternative language for each clause. The Bidder should also provide an explanation of why the Bidder rejected the clause or rejected the clause and provided alternate language using 'Track Changes'. Upon request an electronic copy of the bid with 'Track Changes' must be submitted in an editable Word format. By signing the ITB Bidder is agreeing to be legally bound by all the accepted terms and conditions, and any proposed alternative terms and conditions submitted with the bid. The State reserves the right to negotiate rejected or proposed alternative language. If the State and Bidder fail to agree on the final Terms and Conditions, the State reserves the right to reject the bid. The State is soliciting bids in response to the ITB. The State reserves the right to reject bids that attempt to substitute the Bidder's commercial contracts and/or documents for this ITB.

The Bidder should submit with their bid any license, user agreement, service level agreement, or similar documents that the Bidder wants incorporated in the Contract. Upon notice of Intent to Award, the Bidder must submit a copy of these documents in an editable Word format. The State will not consider incorporation of any document not submitted with the Bidder's bid. These documents shall be subject to negotiation and will be incorporated as addendums if agreed to by the Parties.

If a conflict or ambiguity arises after the addendums have been negotiated and agreed to, the addendums shall be interpreted as follows:

1. If only one (1) Party's document has a particular clause then that clause shall control;
2. If both Party's documents have a similar clause, but the clauses do not conflict, the clauses shall be read together;
3. If both Party's documents have a similar clause, but the clauses conflict, the State's clause shall control.

A. GENERAL

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
MDR			

The contract resulting from this ITB shall incorporate the following documents:

1. Invitation to Bid and Addenda;
2. Amendments to the ITB;
3. Questions and Answers;
4. Contractor's bid (ITB);
5. Award;
6. The executed Contract and any Addenda; and,
7. Amendments to the Contract

These documents constitute the entirety of the contract.

Unless otherwise specifically stated in a future contract amendment, in case of any conflict between the incorporated documents, the documents shall govern in the following order of preference with number one (1) receiving preference over all other documents and with each lower numbered document having preference over any higher numbered document: 1) Amendment to the executed Contract with the most recent dated amendment having the highest priority, 2) executed Contract and any attached Addenda, 3) Amendments to ITB and any Questions and Answers, 4) the original ITB document and any Addenda, and 5) the Contractor's submitted Bid.

Any ambiguity or conflict in the contract discovered after its execution, not otherwise addressed herein, shall be resolved in accordance with the rules of contract interpretation as established in the State.

B. NOTIFICATION

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
MDR			

Contractor and State shall identify the contract manager who shall serve as the point of contact for the executed contract.

Communications regarding the executed contract shall be in writing and shall be deemed to have been given if delivered personally or mailed, by U.S. Mail, postage prepaid, return receipt requested, to the parties at their respective addresses set forth below, or at such other addresses as may be specified in writing by either of the parties. All notices, requests, or communications shall be deemed effective upon personal delivery or five (5) calendar days following deposit in the mail.

Vendor Contract Manager	Agency Contract Manager Julie Dabydeen
Vendor	Agency Department of Administrative Services, State Purchasing Bureau
Vendor Street Address	Agency Street Address 1526 K Street, Suite 130
Vendor City, State, Zip	Agency City, State, Zip Lincoln, NE 68508

Either party may change its address for notification purposes by giving notice of the change, and setting forth the new address and an effective date.

C. GOVERNING LAW

Notwithstanding any other provision of this contract, or any amendment or addendum(s) entered into contemporaneously or at a later time, the parties understand and agree that, (1) the State of Nebraska is a sovereign state and its authority to contract is therefore subject to limitation by the State's Constitution, statutes, common law, and regulation; (2) this contract will be interpreted and enforced under the laws of the State of Nebraska; (3) any action to enforce the provisions of this agreement must be brought in the State of Nebraska per state law; (4) the person signing this contract on behalf of the State of Nebraska does not have the authority to waive the State's sovereign immunity, statutes, common law, or regulations; (5) the indemnity, limitation of liability, remedy, and other similar provisions of the final contract, if any, are entered into subject to the State's Constitution, statutes, common law, regulations, and sovereign immunity; and, (6) all terms and conditions of the final contract, including but not limited to the clauses concerning third-party use, licenses, warranties, limitations of liability, governing law and venue, usage verification, indemnity, liability, remedy or other similar provisions of the final contract are entered into specifically subject to the State's Constitution, statutes, common law, regulations, and sovereign immunity.

The Parties must comply with all applicable local, state and federal laws, ordinances, rules, orders, and regulations.

D. BEGINNING OF WORK

The Contractor shall not commence any billable work until a valid contract has been fully executed by the State and the successful Contractor. The Contractor will be notified in writing when work may begin.

E. CHANGE ORDERS OR SUBSTITUTIONS

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
MDR			

The State and the Contractor, upon the written agreement, may make changes to the contract within the general scope of the ITB. Changes may involve specifications, the quantity of work, or such other items as the State may find necessary or desirable. Corrections of any deliverable, service, or work required pursuant to the contract shall not be deemed a change. The Contractor may not claim forfeiture of the contract by reasons of such changes.

The State or Contractor may prepare a written description of the work required due to the change and the Contractor shall prepare an itemized cost sheet for the change. Changes in work and the amount of compensation to be paid to the Contractor shall be determined in accordance with applicable unit prices if any, a pro-rated value, or through negotiations. The State shall not incur a price increase for changes that should have been included in the Contractor's bid, were foreseeable, or result from difficulties with or failure of the Contractor's bid or performance.

No change shall be implemented by the Contractor until approved by the State, and the Contract is amended to reflect the change and associated costs, if any. If there is a dispute regarding the cost, but both parties agree that immediate implementation is necessary, the change may be implemented, and cost negotiations may continue with both Parties retaining all remedies under the contract and law.

Vendor will not substitute any item that has been awarded without prior written approval of SPB.

F. BREACH

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
MDR			

Either Party may terminate the contract, in whole or in part, if the other Party breaches its duty to perform its obligations under the contract in a timely and proper manner. Termination requires written notice of default and a thirty (30) calendar day (or longer at the non-breaching Party's discretion considering the gravity and nature of the default) cure period. Said notice shall be delivered by Certified Mail, Return Receipt Requested, or in person with proof of delivery. Allowing time to cure a failure or breach of contract does not waive the right to immediately terminate the contract for the same or different contract breach which may occur at a different time.

In case of breach by the Contractor, the State may, without unreasonable delay, make a good faith effort to make a reasonable purchase or contract to purchased goods in substitution of those due from the contractor. The State may recover from the Contractor as damages the difference between the costs of covering the breach. Notwithstanding any clause to the contrary, the State may also recover the contract price together with any incidental or consequential damages defined in UCC Section 2-715, but less expenses saved in consequence of Contractor's breach.

The State's failure to make payment shall not be a breach, and the Contractor shall retain all available statutory remedies. (See Indemnity - Self-Insurance and Payment)

G. NON-WAIVER OF BREACH

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
MDR			

The acceptance of late performance with or without objection or reservation by a Party shall not waive any rights of the Party nor constitute a waiver of the requirement of timely performance of any obligations remaining to be performed.

H. SEVERABILITY

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
MDR			

If any term or condition of the contract is declared by a court of competent jurisdiction to be illegal or in conflict with any law, the validity of the remaining terms and conditions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if the contract did not contain the provision held to be invalid or illegal.

I. INDEMNIFICATION

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
MDR			

1. GENERAL

The Contractor agrees to defend, indemnify, and hold harmless the State and its employees, volunteers, agents, and its elected and appointed officials ("the indemnified parties") from and against any and all claims, liens, demands, damages, liability, actions, causes of action, losses, judgments, costs, and expenses of every nature, including investigation costs and expenses, settlement costs, and attorney fees and expenses ("the claims"), sustained or asserted against the State for personal injury, death, or property loss or damage, arising out of, resulting from, or attributable to the willful misconduct, negligence, error, or omission of the Contractor, its employees, Subcontractors, consultants, representatives, and agents, resulting from this contract, except to the extent such Contractor liability is attenuated by any action of the State which directly and proximately contributed to the claims.

2. INTELLECTUAL PROPERTY

The Contractor agrees it will, at its sole cost and expense, defend, indemnify, and hold harmless the indemnified parties from and against any and all claims, to the extent such claims arise out of, result from, or are attributable to, the actual or alleged infringement or misappropriation of any patent, copyright, trade secret, trademark, or confidential information of any third party by the Contractor or its employees, Subcontractors, consultants, representatives, and agents; provided, however, the State gives the Contractor prompt notice in writing of the claim. The Contractor may not settle any infringement claim that will affect the State's use of the Licensed Software without the State's prior written consent, which consent may be withheld for any reason.

If a judgment or settlement is obtained or reasonably anticipated against the State's use of any intellectual property for which the Contractor has indemnified the State, the Contractor shall, at the Contractor's sole cost and expense, promptly modify the item or items which were determined to be infringing, acquire a license or licenses on the State's behalf to provide the necessary rights to the State to eliminate the infringement, or provide the State with a non-infringing substitute that provides the State the same functionality. At the State's election, the actual or anticipated judgment may be treated as a breach of warranty by the Contractor, and the State may receive the remedies provided under this ITB.

3. PERSONNEL

The Contractor shall, at its expense, indemnify and hold harmless the indemnified parties from and against any claim with respect to withholding taxes, worker's compensation, employee benefits, or any other claim, demand, liability, damage, or loss of any nature relating to any of the personnel, including subcontractor's and their employees, provided by the Contractor.

4. SELF-INSURANCE (Statutory)

The State is self-insured for any loss and purchases excess insurance coverage pursuant to Neb. Rev. Stat. § 81-8,239.01 (Reissue 2008). If there is a presumed loss under the provisions of this agreement, Contractor may file a claim with the Office of Risk Management pursuant to Neb. Rev. Stat. §81-8,829 through 81-8,306 for review by the State Claims Board. The State retains all rights and immunities under the State

Miscellaneous (Section 81-8,294), Tort (Section 81-8,209), and Contract Claim Acts (Section 81-8,302), as outlined in Neb. Rev. Stat. § 81-8,209 et seq. and under any other provisions of law and accepts liability under this agreement to the extent provided by law.

J. ATTORNEY'S FEES

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
MDR			

In the event of any litigation, appeal, or other legal action to enforce any provision of the contract, the Parties agree to pay all expenses of such action, as permitted by law and if order by the court, including attorney's fees and costs, if the other party prevails.

K. ASSIGNMENT, SALE, OR MERGER

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
MDR			

Either party may assign the contract upon mutual written agreement of the other party. Such agreement shall not be unreasonably withheld.

The Contractor retains the right to enter into a sale, merger, acquisition, internal reorganization, or similar transaction involving Contractor's business. Contractor agrees to cooperate with the State in executing amendments to the contract to allow for the transaction. If a third party or entity is involved in the transaction, the Contractor will remain responsible for performance of the contract until such time as the person or entity involved in the transaction agrees in writing to be contractually bound by this contract and perform all obligations of the contract.

L. CONTRACTING WITH OTHER POLITICAL SUB-DIVISIONS OF THE STATE OR ANOTHER STATE

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
MDR			

The Contractor may, but shall not be required to, allow agencies, as defined in Neb. Rev. Stat. §81-145, to use this contract. The terms and conditions, including price, of the contract may not be amended. The State shall not be contractually obligated or liable for any contract entered into pursuant to this clause.

The Contractor may, but shall not be required to, allow other states, agencies or divisions of other states, or political subdivisions of other states to use this contract. The terms and conditions, including price, of this contract shall apply to any such contract, but may be amended upon mutual consent of the Parties. The State of Nebraska shall not be contractually or otherwise obligated or liable under any contract entered into pursuant to this clause. The State shall be notified if a contract is executed based upon this contract.

M. FORCE MAJEURE

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
MDR			

Neither party shall be liable for any costs or damages, or for default resulting from its inability to perform any of its obligations under the contract due to a natural or manmade event outside the control and not the fault of the affected party ("Force Majeure Event"). The Party so affected shall immediately make a written request for relief to the other party, and shall have the burden of proof to justify the request. The other Party may granted the relief requested; relief may not be unreasonably withheld. Labor disputes with the impacted party's own employees will not be considered a Force Majeure Event.

N. CONFIDENTIALITY

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
MDR			

All materials and information provided by the Parties or acquired by a Party on behalf of the other Party shall be regarded as confidential information. All materials and information provided or acquired shall be handled in accordance with federal and state law, and ethical standards. Should said confidentiality be breached by a Party, the Party shall notify the other Party immediately of said breach and take immediate corrective action.

It is incumbent upon the Parties to inform their officers and employees of the penalties for improper disclosure imposed by the Privacy Act of 1974, 5 U.S.C. 552a. Specifically, 5 U.S.C. 552a (i)(1), which is made applicable by 5 U.S.C. 552a (m)(1), provides that any officer or employee, who by virtue of his/her employment or official position has possession of or access to agency records which contain individually identifiable information, the disclosure of which is prohibited by the Privacy Act or regulations established thereunder, and who knowing that disclosure of the specific material is prohibited, willfully discloses the material in any manner to any person or agency not entitled to receive it, shall be guilty of a misdemeanor and fined not more than \$5,000.

O. EARLY TERMINATION

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
MDR			

The contract may be terminated as follows:

1. The State and the Contractor, by mutual written agreement, may terminate the contract at any time.
2. The State, at its sole discretion, may terminate the contract for any reason upon thirty (30) calendar day's written notice to the Contractor. Such termination shall not relieve the Contractor of warranty or other service obligations incurred under the terms of the contract. In the event of termination the Contractor shall be entitled to payment, determined on a pro rata basis, for products or services satisfactorily performed or provided.
3. The State may terminate the contract immediately for the following reasons:
 - a. if directed to do so by statute;

- b. Contractor has made an assignment for the benefit of creditors, has admitted in writing its inability to pay debts as they mature, or has ceased operating in the normal course of business;
- c. a trustee or receiver of the Contractor or of any substantial part of the Contractor's assets has been appointed by a court;
- d. fraud, misappropriation, embezzlement, malfeasance, misfeasance, or illegal conduct pertaining to performance under the contract by its Contractor, its employees, officers, directors, or shareholders;
- e. an involuntary proceeding has been commenced by any party against the Contractor under any one of the chapters of Title 11 of the United States Code and (i) the proceeding has been pending for at least sixty (60) calendar days; or (ii) the Contractor has consented, either expressly or by operation of law, to the entry of an order for relief; or (iii) the Contractor has been decreed or adjudged a debtor;
- f. a voluntary petition has been filed by the Contractor under any of the chapters of Title 11 of the United States Code;
- g. Contractor intentionally discloses confidential information;
- h. Contractor has or announces it will discontinue support of the deliverable; and,
- i. In the event funding is no longer available.

P. CONTRACT CLOSEOUT

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
MDR			

Upon termination of the contract for any reason the Contractor shall within thirty (30) days, unless stated otherwise herein:

1. Transfer all completed or partially completed deliverables to the State;
2. Transfer ownership and title to all completed or partially completed deliverables to the State;
3. Return to the State all information and data, unless the Contractor is permitted to keep the information or data by contract or rule of law. Contractor may retain one copy of any information or data as required to comply with applicable work product documentation standards or as are automatically retained in the course of Contractor's routine back up procedures;
4. Cooperate with any successor contractor, person or entity in the assumption of any or all of the obligations of this contract;
5. Cooperate with any successor contractor, person or entity with the transfer of information or data related to this contract;
6. Return or vacate any state owned real or personal property;

Nothing in this Section should be construed to require the Contractor to surrender intellectual property, real or person property, or information or data owned by the Contractor for which the State has no legal claim.

III. CONTRACTOR DUTIES

A. INDEPENDENT CONTRACTOR / OBLIGATIONS

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
MDR			

It is agreed that the Contractor is an independent contractor and that nothing contained herein is intended or should be construed as creating or establishing a relationship of employment, agency, or a partnership.

The Contractor is solely responsible for fulfilling the contract. The Contractor or the Contractor's representative shall be the sole point of contact regarding all contractual matters.

The Contractor shall secure, at its own expense, all personnel required to perform the services under the contract. The personnel the Contractor uses to fulfill the contract shall have no contractual or other legal relationship with the State; they shall not be considered employees of the State and shall not be entitled to any compensation, rights or benefits from the State, including but not limited to, tenure rights, medical and hospital care, sick and vacation leave, severance pay, or retirement benefits.

By-name personnel commitments made in the Contractor's bid shall not be changed without the prior written approval of the State. Replacement of these personnel, if approved by the State, shall be with personnel of equal or greater ability and qualifications.

The Contractor warrants that all persons assigned to the project shall be employees of the Contractor or a Subcontractor, and shall be fully qualified to perform the work required herein. Personnel employed by the Contractor or a subcontractor to fulfill the terms of the contract shall remain under the sole direction and control of the Contractor or the subcontractor respectively.

With respect to its employees, the Contractor agrees to be solely responsible for the following:

1. Any and all pay, benefits, and employment taxes and/or other payroll withholding;
2. Any and all vehicles used by the Contractor's employees, including all insurance required by state law;
3. Damages incurred by Contractor's employees within the scope of their duties under the contract;
4. Maintaining Workers' Compensation and health insurance that complies with state and federal law and submitting any reports on such insurance to the extent required by governing law;
5. Determining the hours to be worked and the duties to be performed by the Contractor's employees; and,
6. All claims on behalf of any person arising out of employment or alleged employment (including without limit claims of discrimination alleged against the Contractor, its officers, agents, or subcontractors or subcontractor's employees).

If the Contractor intends to utilize any subcontractor, the Subcontractor's level of effort, tasks, and time allocation must be clearly defined in the Contractor's bid. The Contractor shall agree that it will not utilize any Subcontractors not specifically included in its bid in the performance of the contract without the prior written authorization of the State.

The State reserves the right to require the Contractor to reassign or remove from the project any Contractor or Subcontractor employee.

Contractor shall insure that the terms and conditions contained in any contract with a sub-contractor does not conflict with the terms and conditions of this contract.

The Contractor shall include a similar provision, for the protection of the State, in the contract with any Subcontractor engaged to perform work on this contract.

B. EMPLOYEE WORK ELIGIBILITY STATUS

The Contractor is required and hereby agrees to use a federal immigration verification system to determine the work eligibility status of employees physically performing work within the State. A federal immigration verification system means the electronic verification of the work authorization program authorized by the Illegal Immigration Reform and Immigrant Responsibility Act of 1996, 8 U.S.C. 1324a, known as the E-Verify Program, or an equivalent federal

program designated by the United States Department of Homeland Security or other federal agency authorized to verify the work eligibility status of an employee.

If the Contractor is an individual or sole proprietorship, the following applies:

1. The Contractor must complete the United States Citizenship Attestation Form, available on the DAS website at <http://das.nebraska.gov/materiel/purchasing.html>

The completed United States Attestation Form should be submitted with the ITB response.

2. If the Contractor indicates on such attestation form that he or she is a qualified alien, the Contractor agrees to provide the U.S. Citizenship and Immigration Services documentation required to verify the Contractor's lawful presence in the United States using the Systematic Alien Verification for Entitlements (SAVE) Program.
3. The Contractor understands and agrees that lawful presence in the United States is required and the Contractor may be disqualified or the contract terminated if such lawful presence cannot be verified as required by Neb. Rev. Stat. § 4-108.

C. COMPLIANCE WITH CIVIL RIGHTS LAWS AND EQUAL OPPORTUNITY EMPLOYMENT / NONDISCRIMINATION (Statutory)

The Contractor shall comply with all applicable local, state, and federal statutes and regulations regarding civil rights laws and equal opportunity employment. The Nebraska Fair Employment Practice Act prohibits Contractors of the State, and their Subcontractors, from discriminating against any employee or applicant for employment, with respect to hire, tenure, terms, conditions, compensation, or privileges of employment because of race, color, religion, sex, disability, marital status, or national origin (Neb. Rev. Stat. §48-1101 through 48-1125). The Contractor guarantees compliance with the Nebraska Fair Employment Practice Act, and breach of this provision shall be regarded as a material breach of contract. The Contractor shall insert a similar provision in all Subcontracts for goods or services to be covered by any contract resulting from this ITB.

D. COOPERATION WITH OTHER CONTRACTORS

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
MDR			

Contractor may be required to work with or in close proximity to other contractors or individuals that may be working on the same or different projects. The Contractor shall agree to cooperate with such other contractors or individuals, and shall not commit or permit any act which may interfere with the performance of work by any other contractor or individual. Contractor is not required to compromise Contractor's intellectual property or proprietary information unless expressly required to do so by this contract.

E. PERMITS, REGULATIONS, LAWS

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
MDR			

The contract price shall include the cost of all royalties, licenses, permits, and approvals, whether arising from patents, trademarks, copyrights or otherwise, that are in any way involved in the contract. The Contractor shall obtain and pay for all royalties, licenses, and permits, and approvals necessary for the performance of the contract. The Contractor must guarantee that it has the full legal right to the materials, supplies, equipment, software, and other items used to execute this contract.

F. INSURANCE REQUIREMENTS

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
MDR			

The Contractor shall throughout the term of the contract maintain insurance as specified herein and provide the State a current Certificate of Insurance/Accord Form (COI) verifying the coverage. The Contractor shall not commence work on the contract until the insurance is in place. If Contractor subcontracts any portion of the Contract the Contractor must, throughout the term of the contract, either:

1. Provide equivalent insurance for each subcontractor and provide a COI verifying the coverage for the subcontractor;
2. Require each subcontractor to have equivalent insurance and provide written notice to the State that the Contractor has verified that each subcontractor has the required coverage; or,
3. Provide the State with copies of each subcontractor's Certificate of Insurance evidencing the required coverage.

The Contractor shall not allow any Subcontractor to commence work until the Subcontractor has equivalent insurance. The failure of the State to require a COI, or the failure of the Contractor to provide a COI or require subcontractor insurance shall not limit, relieve, or decrease the liability of the Contractor hereunder.

In the event that any policy written on a claims-made basis terminates or is canceled during the term of the contract or within one (1) year of termination or expiration of the contract, the contractor shall obtain an extended discovery or reporting period, or a new insurance policy, providing coverage required by this contract for the term of the contract and one (1) year following termination or expiration of the contract.

If by the terms of any insurance a mandatory deductible is required, or if the Contractor elects to increase the mandatory deductible amount, the Contractor shall be responsible for payment of the amount of the deductible in the event of a paid claim.

Notwithstanding any other clause in this Contract, the State may recover up to the liability limits of the insurance policies required herein.

1. WORKERS' COMPENSATION INSURANCE

The Contractor shall take out and maintain during the life of this contract the statutory Workers' Compensation and Employer's Liability Insurance for all of the contractors' employees to be engaged in work on the project under this contract and, in case any such work is sublet, the Contractor shall require the Subcontractor similarly to provide Worker's Compensation and Employer's Liability Insurance for all of the Subcontractor's employees to be engaged in such work. This policy shall be written to meet the statutory requirements for the state in which the work is to be performed, including Occupational Disease. **The policy shall include a waiver of subrogation in favor of the State. The COI shall contain the mandatory COI subrogation waiver language found hereinafter.** The amounts of such insurance shall not be less than the limits stated hereinafter. For employees working in the State, the policy must be written by an entity authorized by the State of Nebraska Department of Insurance to write Workers' Compensation and Employer's Liability Insurance for Nebraska employees.

2. COMMERCIAL GENERAL LIABILITY INSURANCE AND COMMERCIAL AUTOMOBILE LIABILITY INSURANCE

The Contractor shall take out and maintain during the life of this contract such Commercial General Liability Insurance and Commercial Automobile Liability Insurance as shall protect Contractor and any Subcontractor performing work covered by this contract from claims for damages for bodily injury, including death, as well as from claims for property damage, which may arise from operations under this contract, whether such operation be by the Contractor or by any Subcontractor or by anyone directly or indirectly employed by either of them, and the amounts of such insurance shall not be less than limits stated hereinafter.

The Commercial General Liability Insurance shall be written on an **occurrence basis**, and provide Premises/Operations, Products/Completed Operations, Independent Contractors, Personal Injury, and Contractual Liability coverage. **The policy shall include the State, and others as required by the contract documents, as Additional Insured(s). This policy shall be primary, and any insurance or self-insurance**

carried by the State shall be considered secondary and non-contributory. The COI shall contain the mandatory COI liability waiver language found hereinafter. The Commercial Automobile Liability Insurance shall be written to cover all Owned, Non-owned, and Hired vehicles.

REQUIRED INSURANCE COVERAGE	
COMMERCIAL GENERAL LIABILITY	
General Aggregate	\$2,000,000
Products/Completed Operations Aggregate	\$2,000,000
Personal/Advertising Injury	\$1,000,000 per occurrence
Bodily Injury/Property Damage	\$1,000,000 per occurrence
Fire Damage	\$50,000 any one fire
Medical Payments	\$10,000 any one person
Damage to Rented Premises	\$300,000 each occurrence
Contractual	Included
XCU Liability (Explosion, Collapse, and Underground Damage)	Included
Independent Contractors	Included
If higher limits are required, the Umbrella/Excess Liability limits are allowed to satisfy the higher limit.	
WORKER'S COMPENSATION	
Employers Liability Limits	\$500K/\$500K/\$500K
Statutory Limits- All States	Statutory - State of Nebraska
Voluntary Compensation	Statutory
COMMERCIAL AUTOMOBILE LIABILITY	
Bodily Injury/Property Damage	\$1,000,000 combined single limit
Include All Owned, Hired & Non-Owned Automobile liability	Included
Motor Carrier Act Endorsement	Where Applicable
UMBRELLA/EXCESS LIABILITY	
Over Primary Insurance	\$5,000,000 per occurrence
MANDATORY COI SUBROGATION WAIVER LANGUAGE	
"Workers' Compensation policy shall include a waiver of subrogation in favor of the State of Nebraska."	
MANDATORY COI LIABILITY WAIVER LANGUAGE	
"Commercial General Liability & Commercial Automobile Liability policies shall be primary and any insurance or self-insurance carried by the State shall be considered secondary and non-contributory. State of Nebraska shall be included as additionally insured."	

If the mandatory COI subrogation waiver language or mandatory COI liability waiver language on the COI states that the waiver is subject to, condition upon, or otherwise limit by the insurance policy a copy of the relevant sections of the policy must be submitted with the COI so the State can review the limitations imposed by the insurance policy.

3. EVIDENCE OF COVERAGE

The Contractor should furnish the State, prior to beginning work and upon, a certificate of insurance coverage complying with the above requirements to the attention of:

Julie Dabydeen
 State Purchasing Bureau
 1526 K Street, Suite 130
 Lincoln, NE 68508

These certificates or the cover sheet shall reference the ITB number, and the certificates shall include the name of the company, policy numbers, effective dates, dates of expiration, and amounts and types of coverage afforded. If the State is damaged by the failure of the Contractor to maintain such insurance, then the Contractor shall be responsible for all reasonable costs properly attributable thereto.

Reasonable notice of cancellation of any required insurance policy must be submitted to Administrative Services State Purchasing Bureau when issued and a new coverage binder shall be submitted immediately to ensure no break in coverage.

4. DEVIATIONS

The insurance requirements are subject to limited negotiation. Negotiation typically includes, but is not necessarily limited to, the correct type of coverage, necessity for Workers' Compensation, and the type of automobile coverage carried by the Contractor.

G. NOTICE OF POTENTIAL CONTRACTOR BREACH

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
MDR			

If Contractor breaches the contract or anticipates breaching the contract the Contractor shall immediately give written notice to the State. The notice shall explain the breach or potential breach, and may include a request for a waiver of the breach if so desired. The State may, at its discretion, temporarily or permanently waive the breach. By granting a temporary waiver, the State does not forfeit any rights or remedies to which the State is entitled by law or equity, or pursuant to the provisions of the contract. Failure to give immediate notice, however, may be grounds for denial of any request for a waiver of a breach.

H. ANTITRUST

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
MDR			

The Contractor hereby assigns to the State any and all claims for overcharges as to goods and/or services provided in connection with this contract resulting from antitrust violations which arise under antitrust laws of the United States and the antitrust laws of the State.

I. CONFLICT OF INTEREST

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
MDR			

By submitting a bid, Contractor certifies that there does not now exist a relationship between the Contractor and any person or entity which is or gives the appearance of a conflict of interest related to this ITB or project.

The Contractor certifies that it shall not take any action or acquire any interest, either directly or indirectly, which will conflict in any manner or degree with the delivery of its goods hereunder or which creates an actual or an appearance of conflict of interest.

The Contractor certifies that it will not employ any individual known by Contractor to have a conflict of interest.

The Parties shall not knowingly, for a period of two years after execution of the contract, recruit or employ any employee or agent of the other Party who has worked on the ITB or project, or who had any influence on decisions affecting the ITB or project.

J. STATE PROPERTY

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
MDR			

The Contractor shall be responsible for the proper care and custody of any State-owned property which is furnished for the Contractor's use during the performance of the contract. The Contractor shall reimburse the State for any loss or damage of such property; normal wear and tear is expected.

K. SITE RULES AND REGULATIONS

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
MDR			

The Contractor shall use its best efforts to ensure that its employees, agents, and Subcontractors comply with site rules and regulations while on State premises. If the Contractor must perform on-site work outside of the daily operational hours set forth by the State, it must make arrangements with the State to ensure access to the facility and the equipment has been arranged. No additional payment will be made by the State on the basis of lack of access, unless the State fails to provide access as agreed to in writing between the State and the Contractor.

L. ADVERTISING

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
MDR			

The Contractor agrees not to refer to the contract award in advertising in such a manner as to state or imply that the company or its goods are endorsed or preferred by the State. Any publicity releases pertaining to the project shall not be issued without prior written approval from the State.

M. DRUG POLICY

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
MDR			

Contractor certifies it maintains a drug free work place environment to ensure worker safety and workplace integrity. Contractor agrees to provide a copy of its drug free workplace policy at any time upon request by the State.

IV. PAYMENT

A. PROHIBITION AGAINST ADVANCE PAYMENT

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
MDR			

Payments shall not be made until contractual deliverable(s) are received and accepted by the State.

B. TAXES

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
MDR			

The State is not required to pay taxes and assumes no such liability as a result of this solicitation. The Contractor may request a copy of the Nebraska Department of Revenue, Nebraska Resale or Exempt Sale Certificate for Sales Tax Exemption, Form 13 for their records. Any property tax payable on the Contractor's equipment which may be installed in a state-owned facility is the responsibility of the Contractor.

C. INVOICES

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
MDR			

Invoices for payments must be submitted by the Contractor to the agency requesting the services with sufficient detail to support payment. Mail invoices to NET, 1800 N 33rd St., Lincoln, NE 68503. The terms and conditions included in the Contractor's invoice shall be deemed to be solely for the convenience of the parties. No terms or conditions of any such invoice shall be binding upon the State, and no action by the State, including without limitation the payment of any such invoice in whole or in part, shall be construed as binding or estopping the State with respect to any such term or condition, unless the invoice term or condition has been previously agreed to by the State as an amendment to the contract.

D. INSPECTION AND APPROVAL

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within ITB Response (Initial)	NOTES/COMMENTS:
MDR			

Final inspection and approval of all work required under the contract shall be performed by the designated State officials.

The State and/or its authorized representatives shall have the right to enter any premises where the Contractor or Subcontractor duties under the contract are being performed, and to inspect, monitor or otherwise evaluate the work

being performed. All inspections and evaluations shall be at reasonable times and in a manner that will not unreasonably delay work.

If a simple inspection of the goods would reveal nonconformity, notice of nonconformity should be provided to the vendor as soon as reasonably practical, but not to exceed thirty (30) days from receipt of goods. This includes visual inspection of product to ensure packaging is not damaged, dented or compromised.

E. PAYMENT (Statutory)

State will render payment to Contractor when the terms and conditions of the contract and specifications have been satisfactorily completed on the part of the Contractor as solely determined by the State. (Neb. Rev. Stat. Section 73-506(1)). The State may require the Contractor to accept payment by electronic means such as ACH deposit. In no event shall the State be responsible or liable to pay for any services provided by the Contractor prior to the Effective Date of the contract, and the Contractor hereby waives any claim or cause of action for any such services.

F. LATE PAYMENT (Statutory)

The Contractor may charge the responsible agency interest for late payment in compliance with the State of Nebraska Prompt Payment Act (See Neb. Rev. Stat. §§ 81-2401 through 81-2408).

G. SUBJECT TO FUNDING / FUNDING OUT CLAUSE FOR LOSS OF APPROPRIATIONS (Statutory)

The State's obligation to pay amounts due on the Contract for a fiscal years following the current fiscal year is contingent upon legislative appropriation of funds. Should said funds not be appropriated, the State may terminate the contract with respect to those payments for the fiscal year(s) for which such funds are not appropriated. The State will give the Contractor written notice thirty (30) calendar days prior to the effective date of termination. All obligations of the State to make payments after the termination date will cease. The Contractor shall be entitled to receive just and equitable compensation for any authorized work which has been satisfactorily completed as of the termination date. In no event shall the Contractor be paid for a loss of anticipated profit.

H. RIGHT TO AUDIT (Statutory)

The State shall have the right to audit the Contractor's performance of this contract upon a thirty (30) day written notice. Contractor shall utilize generally accepted accounting principles, and shall maintain the accounting records, and other records and information relevant to the contract (Information) to enable the State to audit the contract. (Neb. Rev. Stat. §84-304 et seq.) The State may audit and the Contractor shall maintain the information during the term of the contract and for a period of five (5) years after the completion of this contract or until all issues or litigation are resolved, whichever is later. The Contractor shall make the Information available to the State at Contractor's place of business or a location acceptable to both Parties during normal business hours. If this is not practical or the Contractor so elects, the Contractor may provide electronic or paper copies of the Information. The State reserves the right to examine, make copies of, and take notes on any Information relevant to this contract, regardless of the form or the Information, how it is stored, or who possesses the Information. In no circumstances will contractor be required to create or maintain documents not kept in the ordinary course of contractor's business operations, nor will contractor be required to disclose any information, including but not limited to product cost data, which is confidential or proprietary to contractor.

The Parties shall pay their own costs of the audit unless the audit finds a previously undisclosed overpayment by the State. If a previously undisclosed overpayment exceeds three percent (3%) of the total contract billings, or if fraud, material misrepresentations, or non-performance is discovered on the part of the Contractor, the Contractor shall reimburse the State for the total costs of the audit. Overpayments and audit costs owed to the State shall be paid within ninety (90) days of written notice of the claim. The Contractor agrees to correct any material weaknesses or condition found as a result of the audit.

V. SCOPE OF WORK

The Bidder must provide the following information in response to this ITB.

A. SCOPE

It is the intent of this bid invitation to issue a purchase order for the item(s) requested.

All items bid shall be of the latest manufacture in production as of the date of the ITB and be of proven performance and under standard design complete as regularly advertised and marketed. All necessary materials for satisfactory performance of the supplies shall be incorporated into the 13kW UHF Transmitter, Mask Filter, Backup Transmitter, and Installation whether or not they may be specifically mentioned below.

Complete specifications, manufacturer's current descriptive literature and/or advertising data sheets with cuts or photographs must be included with the bid for the IDENTICAL items proposed. Any information necessary to show compliance with these specifications not given on the manufacturer's descriptive literature and/or advertising data sheets must be supplied in writing on or attached to the bid document. If manufacturer's information necessary to show compliance with these specifications is not attached to the bid document, the Bidder may be required to submit requested information within three (3) business days of a written request. Failure to submit requested descriptive literature or advertising data sheets may be grounds to reject the bid.

B. CHANGE ORDER

This Purchase Order may be amended in writing, within scope, upon the agreement of both parties.

C. REVISIONS

In the event any product is discontinued or replaced upon mutual consent prior to delivery of the goods, the State reserves the right to amend this purchase order to include the alternate product.

D. STATE REQUIREMENTS AND GENERAL INFORMATION

NET will be employing an electrical contractor to perform electrical work. NET and NET's electrical contractor will be responsible for providing all raceway, electrical, including any service entry modifications, building penetrations.

NET will be responsible for disposal of refuse after installation. NET will be responsible for demolition and removal of old equipment and systems, including approved EPA disposal of glycol and oil filled high voltage transformers.

NET will be responsible for providing a roll off dumpster for disposal.

NET will be ready for installation when equipment is delivered. NET has a temporary 400W backup transmitter that will keep the site on the air during demolition phase and installation of new transmitters. This existing backup transmitter will be decommissioned by NET staff following installation of new transmitters. This temporary backup transmitter is placed in an area that will not interfere with installation of new equipment.

NET will be providing IP access and services for remote monitoring and IP control. NET will interface new transmitters to the existing remote control systems.

This is not an FCC repack station. Absolute deadline to be on the air is June 2019. It is not necessary to stagger delivery of backup and high power transmitters. No tower or antenna work are required for this installation.

Contractor will be allowed to work extended hours and weekends.

A bid bond is not required with this ITB. ITB does not have Liquidated Damages

Billing and payment will be lump sum at final acceptance.

VI. INVITATION TO BID - TECHNICAL SPECIFICATIONS

A. BIDDER INSTRUCTIONS

Bidder must respond to each of the following statements. Specifications listed are minimum conditions that must be met in order for a Bidder to qualify for the award.

"YES" response means the Bidder guarantees they can meet this condition.

"NO" response means the Bidder cannot meet this condition and will not be considered.

"NO & PROVIDE ALTERNATIVE" responses should be used only with a narrative response in the NOTES/COMMENTS section explaining in detail any deviation from the Bidder's ability to meet the condition, and an explanation of how this would be determined to be an acceptable alternative to meeting the condition. Alternatives must be detailed in such a way that allows such deviations to be fully evaluated. The State shall determine at its sole discretion whether or not the Bidder's alternative is an acceptable alternative.

B. NON-COMPLIANCE STATEMENT

YES	NO	NO & PROVIDE ALTERNATIVE	
YES			1. Read these specifications carefully. Any and all exceptions to these specifications must be written on or attached to quotation request. Any noncompliance may void your quotation. Non-compliance to any single specification can void your quotation.
YES			2. It is the responsibility of Bidders to obtain information and clarifications as provided below. The State is not responsible for any erroneous or incomplete understandings or wrongful interpretations of this ITB by any Bidder.
YES			3. No interpretation related to the meaning of bid specifications or other pre-bid documents will be made orally to any Bidder by the State. Any ITB interpretation must be put in writing and faxed by the Bidder to: the State Purchasing Bureau, Fax (402) 471-2089 or e-mailed to AS Materiel Purchasing as.materielpurchasing@nebraska.gov by the last day to submit written questions that is specified in the Schedule of Events. (Inquiries received after the last day to submit written questions may not be addressed).
NOTES/COMMENTS:			

C. TECHNICAL SPECIFICATIONS: 13kW (at output of mask filter) Main Transmitter, High-Efficiency, Solid State, Liquid Cooled Digital UHF Channel 28 Television Transmitter, 480V 3 phase electrical hookup

YES	NO	NO & PROVIDE ALTERNATIVE	
YES			1. 13kW (at output of mask filter) High-Efficiency, Solid State Liquid Cooled Digital UHF Television Transmitter, Channel 28, 480V 3 phase WYE electrical hookup.
YES			2. Liquid cooled dummy load must be included in RF system. Please note that existing liquid cooled dummy load on site will be decommissioned by NET.
YES			3. Transmitter is to be capable of producing 13kW at output of mask filter.
YES			4. The FCC Facility ID for this site is 47987

YES			5.	Dual Multi-Standard Exciter/Driver ATSC 3.0 capable, with web browser interface, front panel display of transmitter parameters, and built-in compliance monitoring.
YES			6.	The exciter shall include at least one (1) ASI/SMPTE-310M input for ATSC 1.0. For ATSC 3, 0 the exciter shall include at least one (1) native 1GBE TSolP input. TSolP input connectors shall be RJ-45, female.
YES			7.	Exciter upgradeable to ATSC 3.0 mode with minimum effort. Exciter to be shipped with ATSC 1.0 configuration. Provide description of process for upgrading to ATSC 3.0 The entire transmitter is easily upgradeable for ATSC 3.0. The only cost will be the license key for ATSC 3.0 operation of the Exciter. Refer to "Brochures" tab for the complete description of an ATSC 3.0 implementation.
YES			8.	A UPS or battery back-up system capable of maintaining exciter operation (except for final amplifier) for up to 15 minutes after an AC power loss shall be included.
YES			9.	PA modules and associated power supplies must be hot swappable to maintain transmitter functionality.
YES			10.	Transmitter shall be designed for unattended remote control operation, compatible with standard commercial parallel remote control systems and must be capable of remote control from either a web interface or SNMP protocol. External remote control system will be provided on site and all wiring/interfaces to remote control will be completed by NET.
YES			11.	Complete liquid cooling system must be included with transmitter. This must include all components and installation needed for a complete cooling system. Cooling system must be of the type that employs dual pumps. Cooling system heat exchanger will be installed on existing outdoor concrete pad with overhead ice bridge. See Diagram 2 for placement details. Existing wall penetrations can be used for new installation. If existing penetrations are not adequate, NET will provide new penetrations. Contractor must supply any indoor or outdoor cable tray and supports used for routing, support, management, and protection of cooling hoses.
YES			12.	Appropriate 3 Phase surge suppressor for transmitter only must be included.
YES			13.	Manufacturer shall include one shelf spare PA module and associated power supplies to operate one module.
YES			14.	PA modules must be broadband in operation with peak performance at UHF channel 28.
YES			15.	Manufacturer shall be responsible for providing all recommended coolant needed for installation and final fill for operation.
YES			16.	Channel 28 8-pole mask filter capable of handling transmitter TPO shall be included as part of the RF system. Output of mask filter needs to feed input of RF switch. RF system must include sampling ports on both sides of mask filter.
YES			17.	4 port RF motorized switch that is capable of remote control operation must be part of RF system. Output of switch must tie into existing 6 1/8" line to antenna. All components needed for RF system are to be supplied with switch. Switch controller and interconnect cables are to be included. Placement of this motorized switch will be in approximate location of existing RF patch panel as shown in Diagram 2. NET staff will remove existing RF patch panel.
YES			18.	Information regarding placement of this transmitter and RF system can be found in Diagram 2 included with this ITB.

YES			19. Please note that more than 100' of 4" grounding strap will be required for this installation.
YES			20. State length of time manufacturer has been established in the design and manufacture of broadcast television transmitters: <u>>45</u> years Manufacturers with less than five (5) years transmitter manufacturing experience may be a factor in award consideration.
YES			21. Does the transmitter manufacturer maintain a service department that is staffed twenty four (24) hours a day, three hundred sixty five (365) days a year?
YES			22. Does the manufacturer maintain a staff of fully trained customer service engineers available for telephone assistance or on-site service? State technical hotline support availability: <u>800-345-9295</u> 24x7x365
YES			23. The manufacturer shall provide replacement parts and service for the equipment offered for a minimum of ten (10) years after the sale of the equipment. Parts warehouse, inventory, and shipping point shall be located in the United States. Replacement parts, or repairs requiring shipment from locations outside the United States will not be allowed.
NOTES/COMMENTS:			

D. TECHNICAL SPECIFICATION: 600-800W BACKUP TRANSMITTER TECHNICAL SPECIFICATIONS

YES	NO	NO & PROVIDE ALTERNATIVE	
YES			1. 600W-800W TPO is acceptable for this transmitter
YES			2. 208-240VAC, Single Phase electrical hookup
YES			3. Appropriate single phase surge suppressor for backup transmitter only must be included.
YES			4. Physical size requirement 4-8RU
YES			5. External channel 28 mask filter, 6 pole air cooled with insertion loss <1.0dB
YES			6. Single exciter configuration. Dual exciter not necessary for this transmitter.
YES			7. Configured for ATSC 1.0 modulation upgradable to ATSC 3.0
YES			8. Output of RF system must connect to RF Switch mentioned in above specification for larger transmitter
YES			9. Must include remote control monitoring and control capability with either web interface or SNMP and must include legacy parallel remote control connection interface. External remote control system will be provided on site and all wiring/interfaces to remote control will be completed by NET.
YES			10. This transmitter should be air cooled design.

YES			11. Transmitter must be installed in vendor supplied rack.
YES			12. Transmitter is to be placed between new high power transmitter and existing FM transmitter. Additional information regarding placement of this transmitter and RF system can be found in Diagram 2 included with this ITB.
NOTES/COMMENTS:			

E. INSTALLATION & PROOF OF PERFORMANCE

YES	NO	NO & PROVIDE ALTERNATIVE	
YES			1. Proof-of-performance testing for both transmitters to insure compliance with Federal Communications Commission (FCC) requirements and manufacturer specifications. Proof-of-performance testing to be coordinated with site contact Robert Vos (308) 991-7443
YES			2. Documentation for both transmitters will be provided to NET upon completion of performance testing and FCC compliance.
YES			3. Provide factory training on specified main high power transmitter for two site engineers following installation.
NOTES/COMMENTS:			

F. ADDITIONAL INSTALLATION SITE CONDITIONS

YES	NO	NO & PROVIDE ALTERNATIVE	
YES			1. State Delays/Issues – The only additional cost allowed would be for delays due to the State. Bidder should provide a daily cost including all per diem for delays due to the State or requested by the State. Please see line 5 on Invitation to Bid Form.
YES			2. NET will coordinate with contractor all equipment that has been delivered to site prior to INSTALLER installation arrival.
YES			3. Site access allowed a minimum of 7 days a week and 10 hours per day.
YES			4. NET will remove equipment prior to new installation and There will adequate space within the facilities to support the installation of all supplied equipment.
YES			5. NET will have adequate and proper space existing external to the building to support cooling system.
YES			6. NET will complete Appropriate electrical and HVAC work to support new equipment prior to installation work start.
YES			7. NET hired electrician shall be on site day of or day after INSTALLER arrival to site to discuss equipment layout and final AC connection to each.

YES			8. Electrical work can be completed without delaying installation and commissioning of equipment by NET.
YES			9. Delays that are considered NET delays can be charged to NET at INSTALLER daily rates plus expenses. See Invitation to Bid Form.
YES			10. NET staff shall be available to support INSTALLER Service Representatives with appropriate site access and other needs as they arise.
YES			11. Existing combiner and mask filter will be removed. New mask filter if ceiling mounted can be positioned within 10'. If not ceiling mounted the dimensions and physical layout will determine the length of this run, please see Diagram 2.
YES			12. NET to supply appropriate acetylene and oxygen tanks for all soft solder and welding requirements.
YES			13. The Station will not have a pallet Jack suitable for moving around and setting cabinets and Heat exchangers.
YES			14. Station will have Ladders on site suitable for operating at facility interior ceiling elevations. Yes
YES			15. Standard HOTEL Rates. Seasonal or Rates beyond Hotel allocation will be included in unit price.
YES			16. The State will not agree to any major design changes, example additional materials, Primary, or 3rd Party material repairs.
YES			17. All work must be completed within one mobilization and within initial proposed time allocation.
YES			18. Any revision or changes associated with cost will have to be agreeable to all parties and formalized through the State Purchasing Bureau as a change order after award has been completed.
YES			19. No additional cost to the State will be allowed for travel from INSTALLER to NET location.
YES			20. Contractor to provide offloading equipment for debris disposal, See section V. D. of ITB for information on debris disposal.
YES			21. NET shall be responsible for proper storage or disposal of any equipment that may have been removed during installation process.
YES			22. Installation or of Commissioning Services any INSTALLER supplied equipment as related to towers, antennas or transmission line from tower to building is not included in this ITB.
YES			23. NET is responsible for work beyond commissioning and operational testing, example, interfacing Remote control, interlocks, and all other external equipment.
YES			24. Installation does not require exterior wall penetrations, Ice Bridge, Electrical, or mechanical additions or modifications unless otherwise specified by customer.
YES			25. INSTALLER will assist NET with Video Input, Remote Control, Network, and Interlock locations; however, NET not INSTALLER will be responsible for all associated wiring, commissioning, programming, and labor related to devices outside the transmitter cabinet.

G. DELIVERY ARO

YES	NO	NO & PROVIDE ALTERNATIVE	
YES			1. Bidder must provide both transmitters at the same time. There is no need to stagger delivery for this installation.
YES			2. It is understood by NET that currently all transmitter manufacturers have long lead times due to the TV repack. However due to state of current transmitter and urgency of replacement, shorter lead times are an award consideration. Absolute deadline for transmitter to be operational on the air is June 2019.
			3. State delivery time ARO: <u>60 days ARO</u> for both transmitters. 60-75 days ARO for 13kW U8 RF system due to TV repack demands.
NOTES/COMMENTS:			

H. DELIVER LOCATIONS/INSTRUCTIONS (BIDDER IS CERTIFYING THAT THEY CAN MEET THE DELIVER LOCATIONS/INSTRUCTIONS)

YES	NO	NO & PROVIDE ALTERNATIVE	
YES			1. KHNE-TV Transmitter site, 1105 W 6 Rd., Giltner, NE 68441
YES			2. Contact Site Manager Robert Vos at 308-991-7443 at least three (3) business days prior to delivery.
YES			3. Must be delivered with vehicle with lift gate. Contractor must provide all equipment required to unload and facilitate installation (including fork lift.) No loading dock on site. Storage facility is available on site if needed.
YES			4. NET staff will be present at site and could help with offloading but anything beyond that is responsibility of contractor.
YES			5. Secure storage garage available for contractor use if needed. Contractor will be responsible for moving equipment from storage garage to final destination.
NOTES/COMMENTS:			

I. PACKAGING

YES	NO	NO & PROVIDE ALTERNATIVE	
YES			<p>1. Cartons are to be clearly marked with size, weight, color, quantity, and the purchase order number. Cartons must be of suitable size and of sufficient strength to protect the contents during shipping, handling and storage.</p>
<p>NOTES/COMMENTS:</p>			

J. QUALITY

YES	NO	NO & PROVIDE ALTERNATIVE	
YES			<p>1. Product quality must meet specifications and be consistent for the term of the contract. A guarantee of satisfactory performance by the supplier and meeting delivery dates are considered to be an integral part of the purchase contract resulting from this bid invitation. All materials must be of first quality, under standard production by the manufacturer and be of standard design, complete as regularly advertised and marketed and be of proven performance. Products are to be fully guaranteed and may be returned for full credit or replacement (at the State's option) for any reason during the initial warranty period with no additional charges for shipping or restocking.</p>
<p>NOTES/COMMENTS:</p>			

K. PRICES

YES	NO	NO & PROVIDE ALTERNATIVE	
YES			<p>1. Price quoted shall be unit price and shall be firm for sixty (60) days from date of an award and are to be net; including transportation and delivery charges fully prepaid by the Bidder F.O.B. Destination as specified. No additional charges will be allowed for packing, handling, fuel surcharge, or partial delivery costs. Any request for an increase must be submitted in writing to the SPB a minimum of thirty (30) days prior to proposed effective date of increase, and must show cause and be accompanied by supporting documentation (such as notification letter from manufacturer). Further documentation may be required by the State, to authenticate the increase (such as manufacturer invoices). Failure to supply any requested supporting documentation may be grounds to cancel the contract. In no instance may a price increases be billed to the State until the contract is amended. The State further reserves the right to reject any proposed price increase(s), cancel the contract and re-bid if determined to be in the best interest of the State. The State will be given full proportionate benefit of any decrease for the term of the contract. Contract supplier or suppliers may honor pricing and extend the contract to political sub-divisions, cities, and counties. Terms and conditions of the contract must be met by political sub-divisions, cities, and counties.</p>
<p>NOTES/COMMENTS:</p>			

L. GRAY MARKET PRODUCTS PROHIBITION

YES	NO	NO & PROVIDE ALTERNATIVE	
YES			<p>1. The State will not accept Gray Market Products for this solicitation. Gray Market is defined as the trade of a commodity through distribution channels which, while legal, are unofficial, unauthorized, or unintended by the original manufacturer. Gray Market items are not designed to be sold in a particular market and cannot be supported by the authorized importer because of various reasons.</p>
<p>NOTES/COMMENTS:</p>			

M. WARRANTY

YES	NO	NO & PROVIDE ALTERNATIVE	
YES			<p>1. Contractor must warrant the average life expectancy supplies hereunder to be not less than that stated in the manufacturer's price list and agree to replace, without cost, all supplies failing to meet this requirement, except where the reduced life is due to conditions beyond the control of the Contractor. Defective parts or those damaged in shipment must be replaced by the Contractor at no charge to the State. The manufacturer's standard warranty shall apply and be in effect for at least three (3) years from the date the equipment was placed in service.</p>
YES			<p>2. The manufacturer shall warrant the transmitter to be free from defects in the material and workmanship under normal use and service for a period of three (3) years from the date of final acceptance.</p>
YES			<p>3. Please provide a copy of the warranty terms and conditions with ITB.</p>
<p>NOTES/COMMENTS: Item#2 and Item #3: Comark has provided a five (5) year warranty for the Parallax U8 13kW liquid cooled transmitter. A three (3) warranty for the 600-800W Backup Air cooled transmitter. A copy of each is attached.</p>			

N. SECRETARY OF STATE REGISTRATION REQUIREMENTS

CHOOSE "YES" TO BEST ANSWER ONLY, CHOOSE "NO" FOR REMAINING LINES

YES	NO	*Prior to contract award and/or upon request of SPB, potential award recipient(s) will be asked to certify compliance with Nebraska Secretary of State Registration by providing a true and exact copy of current (dated within 90 days) valid Certificate of Good Standing or Letter of Good Standing.
		<p>1. Bidder is a SOLE PROPRIETORSHIP (in which case, no Letter of Good Standing/Certificate of Good Standing is required)</p> <p>If the Bidder is an Individual or Sole Proprietorship, the following applies:</p> <p style="padding-left: 40px;">a. The Bidder must complete the United States Citizenship Attestation Form, available on the Department of Administrative Services website at http://das.nebraska.gov/materiel/purchasing.html</p> <p>The completed United States Attestation Form should be submitted with the Invitation to Bid response.</p> <p style="padding-left: 40px;">b. If the Bidder indicates on such attestation form that he or she is a qualified alien, the Contractor agrees to provide the U.S. Citizenship and Immigration Services documentation required to verify the Contractor's lawful presence in the United States using the Systematic Alien Verification for Entitlements (SAVE) Program.</p> <p style="padding-left: 40px;">c. The Bidder understands and agrees that lawful presence in the United States is required and the Contractor may be disqualified or the contract terminated if such lawful presence cannot be verified as required by Neb. Rev. Stat. § 4-108.</p>
		<p>2. Bidder is a GENERAL PARTNERSHIP (in which case, no Letter of Good Standing/Certificate of Good Standing is required).</p>
YES		<p>3. Bidder is a FOREIGN or DOMESTIC CORPORATION or BUSINESS and a copy of current Letter of Good Standing/Certificate of Good Standing from the Nebraska Secretary of State is provided within bid submission documents.</p>
		<p>4. Bidder is a FOREIGN or DOMESTIC CORPORATION or BUSINESS and a copy of current Letter of Good Standing/Certificate of Good Standing from the Nebraska Secretary of State will be provided in a timely manner upon request prior to award.</p>

Comark comment on Section M, item#3: A letter of good standing is attached.

Form A
Bidder Contact Sheet
Invitation To Bid Number 5970 OF REBID

Form A should be completed and submitted with each response to this ITB. This is intended to provide the State with information on the Bidder's name and address, and the specific person(s) who are responsible for preparation of the Bidder's response.

Preparation of ITB Contact Information	
Bidder Name:	HITACHI KOKUSAI ELECTRIC COMARK LLC
Bidder Address:	104 FEEDING HILLS ROAD SOUTHWICK, MA 01077
Contact Person & Title:	MICHAEL ROOSA, SALES MANAGER
E-mail Address:	mroosa@comarktv.com
Telephone Number (Office):	413-998-1529
Telephone Number (Cellular):	570-881-3951
Fax Number:	413-998-1194

Each Bidder shall also designate a specific contact person who will be responsible for responding to the State if any clarifications of the Bidder's response should become necessary.

Communication with the State Contact Information	
Bidder Name:	HITACHI KOKUSAI ELECTRIC COMARK LLC
Bidder Address:	104 FEEDING HILLS ROAD SOUTHWICK, MA 01077
Contact Person & Title:	MICHAEL ROOSA, SALES MANAGER
E-mail Address:	mroosa@comarktv.com
Telephone Number (Office):	413-998-1529
Telephone Number (Cellular):	570-881-3951
Fax Number:	413-998-1194



Hitachi Kokusai Electric Comark LLC Proposal
P#3883

For
PARALLAX Digital Television Transmitter
ECompact Digital Television Backup Transmitter

ITB#5970 OF REBID

Prepared for:
Julie Dabydeen
State Purchasing Bureau, State of Nebraska
402 471 6500

as.materielpurchasing@nebraska.gov

COMARK
Communications



IFB#5970 OF REBID 13kW UHF Transmitter and Mask Filter

PROPOSAL REFERENCE #:
P#3883

Hitachi Kokusai Electric Comark LLC

104 Feeding Hills Road
Southwick, MA 01077
TEL: (413) 998-1100
FAX: (413) 998-1178

Westfield Bank
141 Elm Street
Westfield, MA 01086
ABA#211871604
Account #1001323052
Swift Code: WFLDUS33

FEIN#27-4660540

**Subject: PARALLAX UHF Liquid Cooled Digital Television Transmitter
ECompact Air Cooled UHF Backup Transmitter**

Call Letters/ID: KHNE CH 28

LINCOLN, NE

Attn: Julie Dabydeen

Group Owner State Purchasing Bureau, State of Nebraska

Phone: 402 471 6500

Email: as.materielpurchasing@nebraska.gov

Contact: Michael Roosa

Phone: (413) 998-1529

Email: mroosa@comarktv.com

Proposal Date: 12/18/18

Validity: 60 days

Item	Model #	PRICE SUMMARY	Qty	Unit Price USD	Total USD
1	HPTV-PRLX-U8	Parallax 13kW UHF Liquid Cooled Digital Main Transmitter with Dual Exciters and RF Mask Filter	1	\$319,610.00	\$319,610.00
2		4 Port RF Transfer Switch	1	\$2,880.00	\$2,880.00
3		Liquid Cooled Dummy Load	1	Included in #1	
4		3-Phase Surge Suppressor for 13kW Transmitter	1	\$4,401.00	\$4,401.00
5	EC701HP-BB	800W UHF Backup Air cooled Digital TV Transmitter with RF Mask Filter, 208V single phase	1	\$30,377.00	\$30,377.00
6		1-Phase Surge Suppressor for 800W Transmitter	1	included in #5	
7	S1	Installation & Proof of Performance	1	\$43,694.00	\$43,694.00
8	S12	Delivery for both transmitters	1	\$16,303.00	\$16,303.00
TOTAL NET PRICE:					\$417,265.00
9	NS1	Extra Cost Per Day for delays	1	\$1,500.00	\$1,500.00

Payment and Delivery:

Payment Terms:	Per State of Nebraska - Lump sum after Final Acceptance
Incoterm 2010:	F.O.B. Destination
Delivery:	60-75 days ARO



IFB#5970 OF REBID 13kW UHF Transmitter and Mask Filter

PROPOSAL REFERENCE #:
P#3883

Hitachi Kokusai Electric Comark LLC

104 Feeding Hills Road
Southwick, MA 01077
TEL: (413) 998-1100
FAX: (413) 998-1178

Westfield Bank
141 Elm Street
Westfield, MA 01086
ABA#211871604
Account #1001323052
Swift Code: WFLDUS33

FEIN#27-4660540

General Conditions:

This quotation contains proprietary information and it may not to be divulged to any third party without the expressed written consent of Hitachi Kokusai Electric Comark LLC

This Proposal and all sales hereunder shall be subject to the attached Sales Terms and Conditions. Although the customer may include or reference its standard forms for orders or other notices hereunder, such standard forms will be superseded by the terms and conditions of this proposal including the attached Sales Terms and Conditions and any term or condition in such standard forms that is inconsistent with or in addition to the terms and conditions of this Proposal shall this Proposal shall have no force or effect.

If this proposal is acceptable, please sign below and fax a copy to Hitachi Kokusai Electric Comark LLC (413) 998-1178. Please attach a copy of a tax exempt certificate (if applicable). Please reference this Proposal Number on all Purchase Orders.

Special Conditions:

None.

Purchaser's Acceptance

Proposal # P#3883

Purchaser's Name: State Purchasing Bureau, State of Nebraska

Signature:

Title:

Date:

Bill To:

Ship To:



P#3883
Hitachi Kokusai Electric Comark Quotation
Equipment & Services
IFB #5970 OF REBID 13kW UHF Transmitter and Mask Filter

ITEM	QTY	PART NO.	DESCRIPTION	EXTN'D PRICE
			Family - <i>PARALLAX</i> Model - <i>HPTV-PRLX-U8</i> DTV Standard ATSC - 8 VSB DTV Channel - 28 System Output - 14.4kW before filter* Amplifier Type LDMOS Input Voltage/Frequency 480VAC / 50/60 Hz 3-phase WYE *13kW after filter	
#1	1	HPTV-PRLX-U8	PARALLAX - 13kw RMS, ATSC Digital UHF Liquid Cooled Transmitter Transmitter System Includes:	\$319,610.00
1				\$319,610.00
1.1.	1		Transmitter rack cabinet with front / rear doors	
1.2	1		Local VGA 15" color touch screen, Ethernet via RJ-45, Web GUI access, Remote I/O (dry loop) via DB-37	
1.3	8		UHF power amplifier modules, Broadband Doherty	
1.4	1		Internal PA RF combiner system (8 inputs)	
1.5	1		Internal low pass harmonic filter	
1.6	1		Liquid Cooling System Containing:	
1.6.1	1		Dual Pump Rack including Control System and Sensors	
1.6.2	1		Heat Exchanger Unit with multi-fan	
1.6.3	1		Necessary Installation materials	
1.7			Pre-mix 50/50 Glycol/water for cooling system	
1.8	2	EXACT-ATSC	UHF TV 8VSB Exciters containing:	
1.8.1			> Reed Solomon Error Correction Coding	
1.8.2			> Data Randomization	
1.8.3			> Data Interleaving and Trellis coding	
1.8.4			> Side Band Correction	
1.8.5			> Digital Adaptive Precorrection DAP™	
1.8.6			> ATSC 1.0, upgradeable to ATSC 3.0	
1.8.7			> Remote Interface	
1.9	1		External RF System, Unitized Floor Mount Configuration	
1.9.1	1		Reflective 8 Pole RF Mask Filter, air convection cooled	
1.9.2	1		Transition 4-1/16" to 6-1/8"	
1.9.3	lot		Coax Kit	
1.9.4	1		Patch Panel	
1.10	1		Miscellaneous coaxial interconnect parts including: <Coaxial sections <Coaxial elbows	



P#3883
Hitachi Kokusai Electric Comark Quotation
Equipment & Services
IFB #5970 OF REBID 13kW UHF Transmitter and Mask Filter

ITEM	QTY	PART NO.	DESCRIPTION	EXTN'D PRICE
1.11	1		Directional coupler coaxial section for DAP™ and output sample	
1.12	lot		Mechanical hardware for standard RF installation	
1.13	1		Instruction Book Set - pdf file	
1.14	1	S11.5	Spare Power Amplifier & Power Supply	
1.17	1	S12	COMARK Solid State TV Transmitter Instruction Course (2 person) A complete comprehensive course for two (2) individuals covering the operation, maintenance and the technical considerations of <i>Solid State</i> equipped transmitters. Course to be given at COMARK'S manufacturing facility in Southwick, Massachusetts at a mutually convenient time. "The CUSTOMER must make their representative(s) available to attend one of the periodically schedule training classes at COMARK facility within one (1) year of the date of the FCC proof of performance test on the transmitter sold herein. Otherwise, COMARK obligation to provide this service shall be considered fulfilled." (Price exclusive of airfare, food, lodging, rental car, hotel/motel and/or other expenses or costs encountered by Buyer's representatives.)	
1.18	1	S25	Warranty COMARK's standard limited warranty of five (5) years from date of delivery. All other terms, conditions, and limitations shall apply.	



P#3883

Hitachi Kokusai Electric Comark Quotation
 Equipment & Services
 IFB #5970 OF REBID 13kW UHF Transmitter and Mask Filter

All Prices In US Dollars

ITEM	QTY	PART NO.	DESCRIPTION	UNIT PRICE	EXTN'D PRICE
#2	1	T5	Four (4) Port Motorized Transfer switch (replaces patch panel item #1.9.4)	\$2,880.00	\$2,880.00
#3	1	NS1	Liquid cooled station RF dummy load (Included in transmitter)	\$0.00	\$0.00
#4	1	S4	3-Phase Surge Suppressor for 13kW Transmitter	\$4,401.00	\$4,401.00
#5	1	EC701HP-BB	800W Backup UHF Air cooled Digital TV Transmitter	\$30,377.00	\$30,377.00
#6	1	S4	1-Phase Surge Suppressor for 600-800W Backup Transmitter	Included in #5	
#7	1	S1	TV Transmitter Installation and Proof of Performance: Complete professional installation of the transmitter in customer's finished building. Includes all mechanical and interconnect materials for standard installation. Complete checkout and commissioning of the purchased COMARK solid state digital transmitter system as described herein. Proof-of-Performance testing of transmitter will be performed into station load. One original set of the tests and measurements taken will be provided.	\$43,694.00	\$43,694.00
#8	1	S16	Transmitter System Transportation & Offloading This service includes the transportation of the transmitter system, including all major subassemblies, from COMARK factory, and vendor facilities to CUSTOMER's site. The price included for this service is a budgetary amount based upon estimated transportation miles and is contingent upon the assumption that the site is readily accessible by air-ride moving vans (tractor-trailer up to 82 feet in length) and has adequate conditions for off-loading. If the site conditions require that the equipment be transferred to other conveyances at locations other than the actual transmitter site and transported to the site, or if the actual charge to COMARK based upon distance, etc., is more than the amount estimated, CUSTOMER understands that the price may be adjusted accordingly. This service does not include either off-loading equipment or personnel required to remove the equipment from the transport vehicles. >This service includes the offloading and placement of transmitter components including heat exchangers and High Voltage Power Suppliers. The price included for this service is an estimate and is contingent upon an offloading/rigging company to be within a thirty-mile radius of the transmitter site, and that transmitter room access and equipment pad access is solid, level, and clear of obstructions. If the actual costs are more than the budgeted amount the price may be adjusted accordingly.	\$16,303.00	\$16,303.00
#9	1	NS2	Extra Cost per day for delays due to the State or requestd by the State	\$1,500.00	\$1,500.00



P#3883

**Hitachi Kokusai Electric Comark Quotation
Equipment & Services
RFP #5970 OF REBID 13kW UHF Transmitter and Mask Filter**

ITEM	QTY	PART NO.	DESCRIPTION	EXTN'D PRICE
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Family - EC700HP-BB Series
Model - EC701HP-BB
 DTV Standard ATSC - 8 VSB
 DTV Channel - 28
 System Output 800W after mask filter

#5			800w Backup Transmitter includes:	
	1	EC701HP-BB	EC701HP-BB 800W UHF Air cooled Digital TV Transmitter Inclusive features of the entire <i>EC700HP-BB Series</i> product line are: > Fully Solid State, 50VDC LDMOS devices > Digital Precorrector > Broadband Doherty High Efficiency UHF Power Amplifiers	\$30,377.00 \$30,377.00
	1		Surge Suppressor	Included
	1		<u>Transmitter System Includes:</u>	
	1		Exciter/Control/Amplifier containing:	
	1	EXACT-ATSC	UHF TV 8VSB Exciter containing: > Reed Solomon Error Correction Coding > Data Randomization > Data Interleaving and Trellis coding > Side Band Correction > Digital Adaptive Precorrection DAP™ > ATSC 1.0, upgradeable to ATSC 3.0 > Remote Interface	
	1		GPS-Antenna per exciter	
	1	CC8001	System controller / user interface (1 required per exciter)	
	1		Power Amplifier with: -- 950 Watts RMS per amplifier chassis -- Standard Input Voltage: 208V single phase -- Internal chassis cooling fans variable speed -- 3RU Rack-Mount Chassis	
	1		Equipment rack cabinet 8RU space	
	1		RF Output Filter (FCC Mask Compliant) > Reflective 6 Pole RF Mask Filter	
	1		Instruction Book Set - pdf file	
	1	S25	Standard Warranty COMARK's limited warranty three (3) year from date of delivery. All other terms, conditions, and limitations shall apply.	

HITACHI KOKUSAI ELECTRIC COMARK LLC WARRANTY

HITACHI KOKUSAI ELECTRIC COMARK LLC hereinafter "SELLER", warrants to CUSTOMER and CUSTOMER only that the Product purchased herein is free from defects in workmanship and material for a period of five (5) years from the date of Delivery.

SELLER agrees, subject to SELLER'S evaluation, to make good "INCOTERMS 2010: FCA factory or origin" (UCC) all defective parts of such Product which are returned, within fifteen (15) days of issuance of written return authorization by SELLER, to SELLER'S factory, transportation prepaid, provided that:

- A. SELLER receives prompt written notification of such defects.
- B. SELLER issues prior written authorization to CUSTOMER to return such parts to SELLER'S factory.
- C. Product has been operated in accordance with the SELLER'S instructions and has been properly maintained.
- D. Product has not been misused, altered or repaired by the CUSTOMER.
- E. Product was installed properly according to SELLER'S standards and criteria.

All returned parts of the Product become SELLER'S property. Correction of such defects by repair or replacement at SELLER'S factory and shipment of the repaired or replacement parts to CUSTOMER "INCOTERMS 2010: FCA SELLER'S factory" (UCC) shall constitute CUSTOMER'S sole and exclusive remedy and the fulfillment of all of SELLER'S obligations in respect to the Product. The CUSTOMER agrees that except for such repair and replacement, SELLER shall in no event be liable for damage or damages of any kind connected with the use of the Product or its failure to function properly. In the event SELLER fails to repair or replace any defective parts CUSTOMER agrees that the exclusive measure of damages for such breach shall be the reasonable cost of repair or replacement of the defective part or parts at the time of the breach.

High power electron amplifier tubes and associated circuit assemblies; generators; heat exchangers; pumps; remote control systems; high voltage power supplies; uninterruptible power supplies; surge suppressors; STLs; antennas and RF systems furnished by the SELLER but manufactured by another company shall bear no warranties other than the special hours-of-use and other warranties extended by and enforceable against the manufacturer at the time of delivery to CUSTOMER (which warranties SELLER will furnish on CUSTOMER'S written request), for the period stated in that warranty or for a period of thirty (30) days from such delivery, whichever is longer.

ALTERATION, MODIFICATION OR UNAUTHORIZED REPAIR OF THE PRODUCT, OPERATION OF PRODUCT OUTSIDE OF SELLER'S RECOMMENDED ENVIRONMENTAL CONDITIONS (INCLUDING BUT NOT LIMITED TO TEMPERATURE AND HUMIDITY), IMPROPER INSTALLATION OR OTHER MISUSE VOIDS THIS WARRANTY AND OPERATES TO RELIEVE SELLER FROM ALL LIABILITY THEREUNDER. SALE OR TRANSFER OF THE PRODUCT TERMINATES THE WARRANTY.

SELLER SHALL NOT, UNDER ANY CIRCUMSTANCES, BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO LOST PROFITS OR REVENUES, WHICH MAY ARISE OUT OF OR UNDER THIS CONTRACT. THE LIMITATION IN THE PREVIOUS SENTENCE AND THE EXCLUSION OF INDIRECT, CONSEQUENTIAL, SPECIAL AND INCIDENTAL DAMAGES SHALL REMAIN IN FULL FORCE AND EFFECT EVEN IF THE REMEDIES FOR BREACH OF WARRANTY PROVIDED IN THIS CONTRACT FAIL OF THEIR ESSENTIAL PURPOSE. THE ABOVE LIMITATION SHALL BE EFFECTIVE REGARDLESS OF THE FACT THAT SELLER IS OR HAS BEEN MADE AWARE OF THE POSSIBILITY OR LIKELIHOOD OF ANY SUCH POTENTIAL DAMAGES.

THE WARRANTY STATED HEREIN IS PERSONAL TO CUSTOMER AND IS EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND OF ANY OTHER OBLIGATIONS OR LIABILITY ON THE PART OF THE SELLER, OR ANY OF ITS AFFILIATES WHETHER IN CONTRACT, TORT OR OTHERWISE. THE SELLER NEITHER ASSUMES NOR HAS AUTHORIZED ANY PERSON TO ASSUME FOR IT ANY OTHER WARRANTY OR LIABILITY IN CONNECTION WITH THE PRODUCT SOLD BY IT.

IT IS SPECIFICALLY UNDERSTOOD AND AGREED THAT SELLER DOES NOT UNDERTAKE TO DO MORE OR OTHER THAN TO CONVEY TO CUSTOMER SELLER'S RIGHT, TITLE AND INTEREST IN AND TO THE PRODUCT; NOR SHALL PROOF OF ALLEGED DEALINGS OR TRADE USAGES, INCONSISTENT WITH THE TERMS HEREOF, BE ADMISSIBLE TO EXPAND THIS OBLIGATION.

HITACHI KOKUSAI ELECTRIC COMARK LLC WARRANTY
800W Air Cooled Backup Transmitter

HITACHI KOKUSAI ELECTRIC COMARK LLC hereinafter "SELLER", warrants to CUSTOMER and CUSTOMER only that the Product purchased herein is free from defects in workmanship and material for a period of three (3) year from the date of Delivery.

SELLER agrees, subject to SELLER'S evaluation, to make good "INCOTERMS 2010: FCA factory or origin" (UCC) all defective parts of such Product which are returned, within fifteen (15) days of issuance of written return authorization by SELLER, to SELLER'S factory, transportation prepaid, provided that:

- A. SELLER receives prompt written notification of such defects.
- B. SELLER issues prior written authorization to CUSTOMER to return such parts to SELLER'S factory.
- C. Product has been operated in accordance with the SELLER'S instructions and has been properly maintained.
- D. Product has not been misused, altered or repaired by the CUSTOMER.
- E. Product was installed properly according to SELLER'S standards and criteria.

All returned parts of the Product become SELLER'S property. Correction of such defects by repair or replacement at SELLER'S factory and shipment of the repaired or replacement parts to CUSTOMER "INCOTERMS 2010: FCA SELLER'S factory" (UCC) shall constitute CUSTOMER'S sole and exclusive remedy and the fulfillment of all of SELLER'S obligations in respect to the Product. The CUSTOMER agrees that except for such repair and replacement, SELLER shall in no event be liable for damage or damages of any kind connected with the use of the Product or its failure to function properly. In the event SELLER fails to repair or replace any defective parts CUSTOMER agrees that the exclusive measure of damages for such breach shall be the reasonable cost of repair or replacement of the defective part or parts at the time of the breach.

High power electron amplifier tubes and associated circuit assemblies; generators; heat exchangers; pumps; remote control systems; high voltage power supplies; uninterruptible power supplies; surge suppressors; STLs; antennas and RF systems furnished by the SELLER but manufactured by another company shall bear no warranties other than the special hours-of-use and other warranties extended by and enforceable against the manufacturer at the time of delivery to CUSTOMER (which warranties SELLER will furnish on CUSTOMER'S written request), for the period stated in that warranty or for a period of thirty (30) days from such delivery, whichever is longer.

ALTERATION, MODIFICATION OR UNAUTHORIZED REPAIR OF THE PRODUCT, OPERATION OF PRODUCT OUTSIDE OF SELLER'S COMMENDED ENVIRONMENTAL CONDITIONS (INCLUDING BUT NOT LIMITED TO TEMPERATURE AND HUMIDITY), IMPROPER INSTALLATION OR OTHER MISUSE VOIDS THIS WARRANTY AND OPERATES TO RELIEVE SELLER FROM ALL LIABILITY THEREUNDER. SALE OR TRANSFER OF THE PRODUCT TERMINATES THE WARRANTY.

SELLER SHALL NOT, UNDER ANY CIRCUMSTANCES, BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO LOST PROFITS OR REVENUES, WHICH MAY ARISE OUT OF OR UNDER THIS CONTRACT. THE LIMITATION IN THE PREVIOUS SENTENCE AND THE EXCLUSION OF INDIRECT, CONSEQUENTIAL, SPECIAL AND INCIDENTAL DAMAGES SHALL REMAIN IN FULL FORCE AND EFFECT EVEN IF THE REMEDIES FOR BREACH OF WARRANTY PROVIDED IN THIS CONTRACT FAIL OF THEIR ESSENTIAL PURPOSE. THE ABOVE LIMITATION SHALL BE EFFECTIVE REGARDLESS OF THE FACT THAT SELLER IS OR HAS BEEN MADE AWARE OF THE POSSIBILITY OR LIKELIHOOD OF ANY SUCH POTENTIAL DAMAGES.

THE WARRANTY STATED HEREIN IS PERSONAL TO CUSTOMER AND IS EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND OF ANY OTHER OBLIGATIONS OR LIABILITY ON THE PART OF THE SELLER, OR ANY OF ITS AFFILIATES WHETHER IN CONTRACT, TORT OR OTHERWISE. THE SELLER NEITHER ASSUMES NOR HAS AUTHORIZED ANY PERSON TO ASSUME FOR IT ANY OTHER WARRANTY OR LIABILITY IN CONNECTION WITH THE PRODUCT SOLD BY IT.

IT IS SPECIFICALLY UNDERSTOOD AND AGREED THAT SELLER DOES NOT UNDERTAKE TO DO MORE OR OTHER THAN TO CONVEY TO CUSTOMER SELLER'S RIGHT, TITLE AND INTEREST IN AND TO THE PRODUCT; NOR SHALL PROOF OF ALLEGED DEALINGS OR TRADE USAGES, INCONSISTENT WITH THE TERMS HEREOF, BE ADMISSIBLE TO EXPAND THIS OBLIGATION.

Components that are shipped as replacement parts to the Product may be remanufactured; provided, however, said remanufactured parts shall in all other ways perform and conform to the specifications of new parts. Any replacement Product or any repair, modification, installation or other service performed by SELLER shall be warranted for a period of ninety (90) days from the date of delivery or the remainder of the original warranty, whichever is longer.

(Rev. 02/27/04) (Rev. 071706 name change.lla) (Rev 022708 name change llc)
(Rev 01/09 name change llc)(Rev 0309 change in payment terms llc)(Rev. c 040111 change in company name llc)
(Rev d 060911 FOB change to Incoterms 2010: FCA)
(Rev.E 061511 – Article 21 revised)
(Ver. F – bank change 092611 llc)
(Ver. G – Article 4 verbiage change 051112 llc)
(Ver. H – Company Name change 111612 llc)
(Ver. I – added 1.D 15 & 16 42314 jmt)
(Ver. J – bank account # change jmt)
(Ver. K – name change 051115 llc)



PARAJLAX™

TRANSMITTER DESIGNED FOR REPACK

UHF/VHF

STACKED. SMART. VERTICAL.

STACKED POWER/HIGHEST POWER DENSITY

PARALLAX™ has you covered for all medium and high power requirements in both UHF and VHF Band 3. With up to 16 Power Amplifiers (PAs) per transmitter cabinet, PARALLAX delivers an industry best of up to 27.5kW UHF Transmitter Power Output (TPO) in a single rack cabinet. Transmitter power levels can be scaled higher with multiple cabinets operating in parallel for 55, 75, or even 100kW TPO — the highest power solid state transmitter available. For stations with lower power levels, the rack can scale back to as few as 3 x 2kW amplifiers for 5kW TPO in UHF.

SMART POWER SUPPLY DESIGN

PARALLAX uses highly efficient commercial off-the-shelf AC to DC rectifiers in the Power Supply Unit (PSU). These rectifiers are typically used in data centers, servers, telecom and enterprise networks and are proven reliable; they feature programmable output voltage (42-58VDC) to maximize device load and associated efficiency. Each PSU incorporates three (3) hot-swap rectifiers for added redundancy; each PA module is paired with a PSU module (1:1 ratio). The separate PSU and PA configuration reduces PA module weight to approximately 50 lbs., so a single technician can easily service the transmitter. The transmitter supports 208VAC or 480VAC for North America, 380VAC for International applications; there is no need for an external, step down transformer.

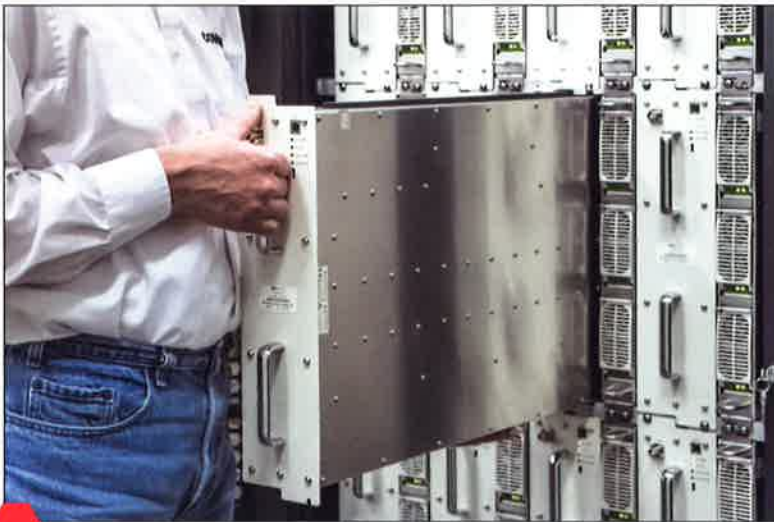


Our AC-DC rectifiers are easy to reach

VERTICAL IS BETTER

Hitachi-Comark reviewed various options for the PA's electro-mechanical design and orientation. A vertical PA and PSU orientation was selected for PARALLAX for several reasons:

- Vertical is easier to handle especially in high power transmitters where amplifiers are mounted both above and below a technician's comfortable reach.
- A vertical module allows an engineer to support the assembly weight with one hand while guiding the unit into operation with the other hand.
- A vertical bank of PA/PSU modules permits straightforward orientation of the associated RF combiner.
- Each bank of PA/PSU modules uses a silver plated, air dielectric, strip-line hybrid RF combiner.
- The orientation of this 3-or 4-way combiner syncs with the remainder of the RF plumbing for an efficient, compact RF design that is fully integral to the cabinet, which saves valuable floor and overhead space.



Liquid cooled power amplifier module

PRECISION COOLING. OPTIMIZED DESIGN. USER-FRIENDLY.



Open PARALLAX Transmitter

OPTIMIZED RF DESIGN

The PARALLAX transmitter incorporates all necessary RF power combiners inside the transmitter cabinet. External RF loads or high power RF combiners are not needed, so installation is simplified. Using a high efficiency, multi-level hybrid system, the RF combiner provides natural isolation of each RF amplifier module; reject loads are liquid cooled and sized to support any modes of emergency operation (with less than full count of amplifiers), ensuring the transmitter stays on-the-air. In addition, multiple reject power level and VSWR sensors throughout the RF system feed key performance metrics back to the transmitter control system. Hitachi-Comark's facility optimizes the entire external RF system including the RF mask filter that is used to meet spectral mask requirements per each customer's specific needs, thus reducing on-site installation time.

UNIQUE USER EXPERIENCE

PARALLAX offers a unique user experience with the streamlined control and monitoring system. Embedded within the transmitter is a field-proven, industrial CAN bus. Each major subassembly within the transmitter incorporates a microcontroller and functions as a "node"—PARALLAX uses separate nodes for each RF amplifier, the cooling system, internal RF system monitoring, the remote I/O (dry loop), and the local emergency transmitter controls. The system also features built-in control redundancy in case of emergency operation, keeping the unit on air.

The master transmitter system controller provides key insight into the overall transmitter: local monitoring, control, and set-up are via a simple web based Graphical User Interface (GUI); the GUI is displayed on the system controller's touch-screen and is available via optional Wi-Fi connection using a smart phone or tablet. An Ethernet connection to the transmitter enables remote web GUI control anywhere in the world. For broadcasters with a Network Operations Center (NOC), remote access can be provided using SNMP v2 and a supplied MIB. For traditional remote control, a dedicated I/O port allows for dry loop connectivity.

LIQUID COOLING

High power density dictates precise liquid cooling technology to remove the dissipated heat. Each PARALLAX rack cabinet utilizes a dedicated cooling loop that consists of the coolant tank, multi-fan heat exchanger, and variable-speed circulating pumps that are sized according to transmitter requirements, thus increasing efficiency. Hitachi-Comark's unique stainless steel pipe-in-aluminum cold plate design optimizes PARALLAX for a standard 50/50 water-glycol mixture. The plate does not have direct contact with the coolant solution, eliminating concerns of galvanic corrosion in the amplifier.



RF combiner

HITACHI-COMARK HAS YOU COVERED.



Remotely diagnose

PARALLAX offers broadcasters additional features including an operational and fault logging system. The transmitter log is stored in non-volatile memory so events can be accessed regardless of transmitter operation. The control system also enables Hitachi-Comark's customer service group to remotely diagnose the operation of the transmitter and to perform remote software updates.

PARALLAX™ TYPICAL CONFIGURATIONS

OPERATING FREQUENCY

- UHF: 470- 608 MHz
- VHF: 174-216 MHz
- 6/7/8 MHz RF Channel bandwidth

MODULATION/STANDARD

- ATSC 1.0, 3.0 upgradeable
- DVB-T/H, T2, Lite
- ISDB-T, DAB

PERFORMANCE

- RF Power - see table below
- SNR ≥ 32dB typical
- Shoulders > 37dB DVB > 47dB ATSC
- Efficiency up to 42% UHF up to 50% VHF Band 3
- RF Stability ± 2%

ELECTRICAL:

- Three Phase AC Mains
- 208 VAC -11% / + 15%
- 380 VAC +/-15%
- 480 VAC -15% / + 8%
- 50/60 Hz
- ≥ 0.98 power factor

MONITORING & CONTROL

- Local 15" color touch screen
- Web: Ethernet via RJ-45
- Wi-Fi: Web GUI access
- Remote I/O (dry loop) via DB-37
- SNMP v2

ENVIRONMENTAL AND SAFETY

- 0° to 45° C Temp range
- ≤ 90% non-condensing relative humidity
- ≤ 3000m Maximum Altitude

MECHANICAL

- Liquid Cooled, external multi-fan heat exchanger
- 50Ω output impedance
- 4-1/16" EIA RF output
- 80" H x 30" W x 56" D per Equipment Rack Cabinet
- See chart below for configurations

WIDEBAND UHF DOHERTY

Number of Amplifiers:	3	4	6	7	8	9	10	11	12	13	14	15	16	32	48	64
UHF Output* (kW):																
Amplifier ATSC	5.4	7.2	11.0	12.6	14.4	16.2	18.0	19.8	21.6	23.4	25.2	27.0	30.0	60.0	82.5	110.0
TPO ATSC (after filter)	5.0	6.5	10.0	11.3	13.0	15.0	16.2	18.0	20.0	21.0	22.7	24.3	27.5	55.0	75.0	100.0
Cabinet Configuration:	Single Transmitter Cabinet												2x	3x	4x Cab	

VHF BAND 3 DOHERTY

Number of Amplifiers:	3	4	6	7	8	9	10	11	12	13	14	15	16	18	24	32
VHF Output* (kW):																
Amplifier ATSC	4.6	6.1	9.1	10.6	12.2	13.7	15.2	16.7	18.2	19.8	21.3	22.8	24.3	27.4	36.5	48.6
TPO ATSC (after filter)	4.3	5.8	8.7	10.1	11.6	13.0	14.4	15.9	17.3	18.8	20.2	21.7	23.1	26.0	34.7	46.2
Cabinet Configuration:	Single Transmitter Cabinet												2x Cab			

* Other multi-cabinet configurations available. Consult your factory sales representative. Specifications subject to change without notice

PARALLAX™

SOLID STATE. BROADBAND. AFFORDABLE.

THE FUTURE HAS ARRIVED. With rapid changes in solid state RF device technologies and design techniques, combined with our commitment to improve efficiency, Hitachi-Comark has developed PARALLAX™—the industry's next generation medium and high power liquid cooled, solid state transmitter.

PARALLAX features unique engineering that allows for highest signal quality, reliability, and efficiency while keeping the cost of ownership as low as possible. Most important, PARALLAX offers flexibility: no matter how large or small, each station is assured top-notch performance for its specific needs. PARALLAX is available in either UHF or VHF Band 3.



 27.5kW 16PA's

KEY FEATURES:

- Unique vertical high-gain RF Power Amplifier (PA) ~50lbs
- Broadband UHF Doherty amplifier technology produces ultra-high RF efficiency
- Double-sided liquid cooling plate configuration optimizes RF power density
- Common system elements (cabinet, user interface, etc.) for both UHF and VHF Band 3
- EXACT DTV exciter supports ATSC or DVB-T/T2; can be upgraded with unique "DualCast" design from ATSC 1.0 to ATSC 3.0, preserving investment
- Same PA output power in ATSC 1.0 & ATSC 3.0
- Liquid cooled amplifiers mean high reliability, simple installation, easy maintenance
- Commercial off-the-shelf (COTS) Hot-Swap AC to DC rectifiers provide >96% efficiency
- Industry leading Digital Adaptive Pre-correction (DAP) attains the highest RF signal performance
- Simple, yet powerful, control system is accessed via a large local touch-screen or through built-in Wi-Fi on tablet or phone
- Remote web GUI control/monitoring or SNMP v2 for Network Operations Center maximizes distant management
- Manufactured, serviced, and supported in the U.S.A.

HITACHI-COMARK OVERVIEW

High performance, award-winning **TV transmitters** backed by more than 45 years of leadership in both inductive output tube (IOT) and solid-state broadcast technologies: **Hitachi Kokusai Electric Comark LLC** provides concrete solutions for the demands of today's global TV broadcast industry.



Corporate Office in Southwick, MA



Hitachi Kokusai Electric Comark LLC

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Toll Free Tel: (800) 288-8364

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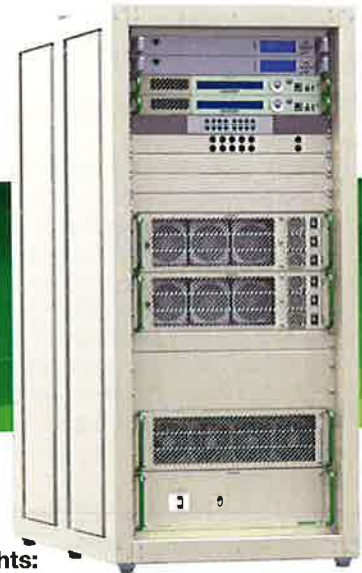
Support@ComarkTV.com

www.ComarkTV.com

UHF Digital TV Transmitters

E-Compact TV • High Efficiency • UHF Broadband • Air Cooled • High Power

ATSC 1.0
ATSC 3.0



Hitachi's E-Compact transmitter Series offers optimal broadcasting features with power efficiency up to 42%. The simplicity of its configuration and operation allows a fast startup and its high robustness ensures a smooth and safe operation. Its high power sub-family is comprised of air cooled transmitters with output powers (before filter) of 850W up to 10.0kW in ATSC 3.0 standard, and of 940W up to 11.1kW in ATSC 1.0.

The devices are assembled on a single rack¹. Its compact design results in a smaller installation footprint.

The power amplifier module has an excellent power density. With 3RU and 19", each PA module is configured for transmitting up to 1.1kWrms.

Developed with Doherty Technology, it provides high efficiency and consumption cost reduction of up to 60% when compared to conventional transmitters.

The E-Compact line astonishes with its transmission versatility, allowing upgrade from ATSC1.0 to 3.0 through software update.

E-Compact Highlights:

- Broadband Doherty amplification technology
- Energy savings of up to 60%
- Compact design, each power amplifier module delivers up to 1.1kWrms within 3RU
- Easy assembly and maintenance
 - Power supplies and Amplifier module featuring Plug In connection, no wiring or cables required.
- Automatic Fan Speed Control providing low noise levels and increased lifespan.
- Power supply with Plug In connection, removeable through front panel:
 - Each power amplifier module features 3 power supplies, which operate in shared mode, ensuring redundancy and perfect phase distribution in three-phase systems.
- Washable air filters
- Mains AC Power distribution drawer²
- RF hybrid combiner with Unbalance Load Module²



E-Compact
Less energy. More power.

Certified Company
ISO 9001
10 years certified

© Hitachi Kokusai Linear Equipamentos Eletrônicos S/A.

Solutions for Broadcast, Video and Communication from Brazil to the world.

UHF Digital Transmitters

E-Compact TV - High Efficiency - UHF Broadband - Air Cooled - High Power

GENERAL SPECIFICATIONS

- IP Input;
- Power amplifier drawers;
- High efficiency with Doherty technology;
- Air cooled;
- Automatic Fan Speed Control providing low noise levels, energy saving and increased lifespan;
- Power supplies featuring Power Factor Correction better than 0.95;
- Measures and alarms through front display and keypad or remotely.
- VSWR and Overdrive protection via hardware with power reduction;
- Software oriented overheating protection for internal modules;
- Adaptative Digital Pre-correction (Linear and No-Linear);
- Telemetry: WEB Server/SNMP, for local or remote management;
- AGING transistor compensation via exciter's front panel;
- Automatic GM compensation with temperature;
- Gain and Phase adjustments per drawer;
- Isolated combiner, enabling Hot Swapwap³

INCLUDED

- Main Control Software, WEB Server and SNMP;
- USB communication Drivers;
- PT-BR, US-EN or ESP manuals (digital formats).
- Passive elements kit: Low-pass filter, before and after-filter probes.

OPTIONALS⁴

- Telemetry through GPRS interface;
- Exciter Redundancy;
- GPS time base (exciter's internal module).

Communication interfaces	USB / Ethernet ⁵ / SNMP
Stability frequency	±1Hz (internal GPS)
Oscillator	PLL synthesized
Power factor	better than 0,95
Operation altitude	up to 2.500m a.s.l ⁶
Environment temperature range	0°C to +45°C
Environment humidity range	0 to 95% (non-condensing)

TS or IP INPUTS

Format	Ethernet ⁵ (IEEE 802.3u) 10Base-T/100Base-TX
Connector	BNC-Female RJ45
Impedance	75Ω

OUTPUT

Operation frequency	470MHz to 608MHz (UHF)
Bandwidth	6 MHz
Power	up 11.1kWrms before filter
Minimum operation power (after filter)	10% of nominal power with 10W steps
TV Standard	ATSC 1.0 and ATSC 3.0
Harmonics/Spurious	better than -60dBc
MER	better than 34dB

TECHNICAL TABLE (typical values)

Model	EC701HP-BB		EC702HP-BB		EC703HP-BB		EC704HP-BB		EC706HP-BB		EC708HP-BB		EC712HP-BB	
Output power (W) ⁷	B.F. ⁸	A.F. ⁸	B.F. ⁸	A.F. ⁸	B.F. ⁸	A.F. ⁸	B.F. ⁸	A.F. ⁸	B.F. ⁸	A.F. ⁸	B.F. ⁸	A.F. ⁸	B.F. ⁸	A.F. ⁸
ATSC 1.0	940	850	1,910	1,680	2,840	2,520	3,790	3,400	5,690	5,210	7,590	6,950	11,120	10,200
ATSC 3.0	850	720	1,720	1,500	2,560	2,250	3,410	3,040	5,120	4,650	6,830	6,200	10,000	9,100
AC mains (43-63Hz)	M208 B208		M208 B208 3-phase 208 (3 phases + GND): 180 to 240V 3-phase 380 (3 phases+neutral+ GND): 380 to 415V											
Output connector	EIA 1-5/8"				EIA 3-1/8"				Remarks / Notes					
Power module	1 module	2 modules	3 modules	4 modules	6 modules	8 modules	12 modules							
AC typical consumption (kW) ⁸	ATSC 1.0 2,500	4,900	7,295	9,695	14,490	19,285	28,880	1 Except EC712HP.						
	ATSC 3.0 2,408	4,715	7,020	9,330	13,950	18,560	27,790	2 Except EC701HP.						
Typical Heat Dissipation (BTU/h) ⁷	3 The PA modules can be removed / inserted with the transmitter in operation, although the PA being removed / inserted must be switched off..													
	ATSC 1.0 5,800	11,000	16,430	21,650	31,920	42,400	64,280	4 Contact Hitachi Kokusai Linear for optionals availability in each standard.						
	ATSC 3.0 5,720	10,900	16,190	21,350	31,500	41,900	63,400	5 Ethernet is a registered trademark of Xerox Corporation.						
Rack dimensions (RU)	8	25	25	25	40	40	40	6 Altitudes above 2.500m under consultation. a.s.l: above sea level.						
Number of racks	1	1	1	1	1	1	2	7 May change depending on MER value, channel and output power. For details, consult Hitachi Kokusai Linear.						
Width (mm)	570	570	570	570	570	570	1,140	8 B.F.: Before Filter / A.F.: After Filter.						
Depth (mm)	900	1,100	1,100	1,100	1,100	1,100	1,100							
Weight (kg)	70	170	210	250	350	420	700							

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Transitioning to ATSC 3.0

CDS Powered by TITAN Live

Hitachi-Comark provides high performance, award winning television transmitters and encoding solutions that are backed by more than 45 years of leadership in broadcast technologies.

ATSC 1.0 vs 3.0

ATSC 1.0 was built upon MPEG2 compression technology allowing a mix of HD and SD programs. ASI is the typical interface between equipment in the encoding and transmission work flow.

ATSC 3.0 is a fully IP connected solution using HEVC compression technology. HEVC yields approximately a 4 times improvement in efficiency over MPEG2 compression. ATSC 3.0 also allows more depth to images, utilizing HDR and WCG technologies to enhance depth and color. While UHD/4K is possible with ATSC 3.0, broadcasters will likely adopt 1080P60/HDR as the de facto resolution transmitted via the OTA signal. This provides a good compromise between Video Quality (VQ) and utilized bandwidth.

Physical Layer Pipes (PLPs)

ATSC 3.0 allows broadcasters to specify the trade-off between payload capacity and signal robustness. Each OTA signal can be configured with multiple PLP's that can be setup for anything from high bit rate services (UHD/HD) to low bit rate services (NRT/mobile) and everything in between. One simple example is to use one PLP for HD programs (1080P60HDR) and a second PLP for distributing multiple lower resolution programs. Due to the flexibility that ATSC 3.0 offers, each broadcaster must decide how to best utilize the capacity of their 6MHz RF channel in ATSC 3.0.



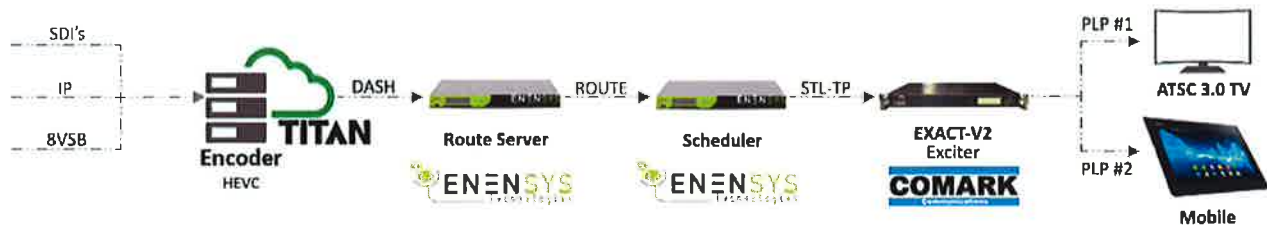
Converged Software for ATSC 3.0

Powered by **TITAN Live**, Comark Digital Services (CDS) is a converged, software based solution for live video compression, stream processing, and control / management. The CDS encoding solution is perfectly suited for ATSC 1.0 and ATSC 3.0, particularly since encoding software licenses are per input. Each encoding license supports multiple outputs including MPEG2, H264, and HEVC at no additional cost.

Transitioning to ATSC 3.0

OTA stations moving towards Next Gen DTV will require additional hardware to meet the ATSC 3.0 standard. The first device is a ROUTE server such as the Enensys ATSCaster. ROUTE is used to deliver all of the data streams (including video, audio, and captioning). A broadcast gateway such as the Enensys ATScheduler provides encapsulation and sends the signal via STL to the transmitter's ATSC 3.0 enabled exciter(s). Both products are typically installed at the studio or the network operations center (NOC).

Transmitters from Hitachi-Comark are equipped with EXACT-V2 exciter platforms that are software upgradeable. A new license key is supplied for each exciter – unlocking the ATSC 3.0 capability. Older transmitters can be potentially upgraded with new exciters, however the RF output power needs to be confirmed since ATSC 3.0 has a 3dB higher peak-to-average ratio compared to ATSC 1.0. Total output power may need to be de-rated from 1.0 to 3.0 operation.



ATSC 3.0 HIGHLIGHTS:

- ▶ Scalable Solution, Buy Only What is Needed, Upgrade Later
- ▶ Web-Based GUI, User-Friendly Management Solution
- ▶ Very High Quality H.265 / HEVC Encoding for SD / HD programs
- ▶ OFDM RF Waveform with 28Mbps Typical Throughput
- ▶ Complies with A/324 IP Studio to Transmitter Link Specification
- ▶ IP Optimized Platform Maximizes Technology Evolution

EXACT-V2

DualCast ATSC 1.0 / 3.0 Digital TV Exciter

The EXACT-V2 is the next generation, compact and powerful exciter platform that delivers an ATSC compliant, on-channel output as well as performs adaptive RF precorrection for the best possible broadcast signal.



Hitachi-Comark provides high performance and award winning television transmitters that are backed by more than 40 years of leadership in both inductive output tube (IOT) and solid-state broadcast technologies.

The next generation EXACT-V2 Digital TV Exciter was developed for the ATSC broadcast market. It uses the compact 1RU exciter hardware platform in conjunction with ATSC compatible firmware and software. The EXACT-V2 exciter is designed to work either in a stand-alone mode with OEM DTV transmitters or fully integrated in Hitachi-Comark digital TV transmitters.

Flexibility by Design

The EXACT-V2 exciter's core modulation and correction functions are processed by firmware that resides on internal Field Programmable Gate Arrays (FPGA).

This architecture provides flexibility so as digital TV standards evolve and change, the processing can be upgraded and adapted to meet these new requirements, simply by loading new firmware.

Beyond the FPGA technology, the exciter platform incorporates a microcontroller for user interface to the monitor and control functions. Custom software running in the exciter provides user access through various Man-Machine Interfaces (MMI) provided from the EXACT-V2.

DAP Technology Streamlines Performance

The EXACT-V2 exciter integrates Digital Adaptive Precorrection (DAP) technology, which provides superior performance that is unattainable using any other correction technique.

This technology allows for simple and easy setup and maintenance of a high performance transmitter system.

DAP technology provides unsurpassed digital correction of all distortions created by a DTV transmitter system. These distortions include nonlinear distortions created by active amplifier devices, such as amplitude and phase distortions along with correction for memory effect. Additionally DAP corrects linear distortions created by the transmitter's high-power passive RF system, such as group delay and frequency response distortions maximizing the SNR performance.

Advanced Monitoring & Control

The EXACT-V2 exciter incorporates local control and monitoring using an enhanced user interface front panel with backlit LCD display, LED's, and menu driven push buttons. Local access includes menus for initial setup, configuration status, and control functions. The front panel displays the forward & reflected power levels, output RF shoulders as well as the SNR performance.

KEY FEATURES

- ▶ Unique *DualCast* ATSC 1.0 to 3.0 upgradeable, protects investment*
- ▶ New IP optimized platform (7xGbe ports) specifically for ATSC 3.0
- ▶ Optional built-in ALP encapsulation for "gateway-free" operation
- ▶ User friendly but advanced WEB GUI local or remote control
- ▶ Industry Leading Digital Adaptive Precorrection (DAP)
- ▶ Dual TS inputs (SMPTE-310M or ASI), provides seamless A/B input redundancy
- ▶ Compact 1RU platform
- ▶ Embedded forward and reflected RF power measurements
- ▶ SNR, shoulders, and FWD / RFL power monitoring via front panel
- ▶ Optional SNMP client, activated via software license

The EXACT-V2 exciter can also be remotely controlled using the Web GUI interface with nothing more than a PC running a standard web browser. The Web GUI allows users to retrieve information such as SNR, lower and upper RF shoulder measurements, user configuration, and alarms.

ATSC Now and the Future

The EXACT-V2 is fully compliant with the ATSC 1.0 A/53 DTV standard. EXACT-V2 includes powerful processing and the required can also be field upgraded* with new firmware/software to support ATSC 3.0, preserving your investment.

Seamless TS Input Switching

The EXACT-V2 features two independent sets of dual (A & B) transport stream (TS) inputs. The dual TS inputs allow signal path diversity (i.e. one ASI TS feed via a fiber link and a second ASI TS feed via a STL microwave). The A & B TS switching can be set for automatic or manual depending on the user's preference.



Monitor/Control:

- ✓ The EXACT-V2 includes a built-in Web based user monitor and control interface
- ✓ Pertinent information is displayed in a user friendly and very intuitive layout
- ✓ The exciter can be setup in minutes with dedicated menus for operation and control

SPECIFICATIONS

Operating Frequency:

- VHF Band 1; 54-88MHz
- VHF Band 3; 174-216MHz
- UHF Bands 4 & 5; 470-862 MHz

Modulation / Standard:

- ATSC 1.0 8VSB ~ ATSC A/53
- ATSC 3.0 ready ~ ATSC A/300*

ASI Interfaces (ATSC 1.0):

- 2 inputs, 1 output; DVB-ASI (or SMPTE-310M input)
- ASI = BNC female connector, 75Ω
- Auto switching between ASI ports

Gbe Interfaces (ATSC 3.0):

- 4 x Gigabit Ethernet; RJ45 ports
- Protocols: UDP, IP, IGMP (V2&V3)
- STL Interface (A/324)
- Built-in ALP Encapsulation (opt.)

RF Output:

- 0dBm output power (rms), Optional +20dBm output (rms)
- N female connector, 50Ω
- Low level rear panel RF monitor port, SMA 50Ω @ -20dBm
- 6 MHz RF channel bandwidth
- > 37dB global MER

Clock and Synchronization:

- 1PPS in/out, BNC female 50Ω,
- 10MHz in/out, BNC female 50Ω

Ancillary Inputs:

- ALE / NLC RF correction inputs, -15 to -5dBm level, SMA female
- FWD/RFL power monitoring inputs, 5dBm max level, SMA

Monitor/Control:

- Web: 2 x Gigabit Ethernet, RJ45
- SNMP: Gigabit Ethernet, RJ45 (opt.)
- General Purpose IO, DB-9 x2
- GPS input, BNC 50Ω (external antenna optional)

Environmental & Safety:

- 0° to 50° C Temp range
- ≤ 95% non-condensing relative humidity

General Electrical & Mechanical:

- 19" W x 1.75" H x 10" D
- 90 ~ 240 VAC, 50/60 Hz
- < 1.5A current draw
- 4.5 kg (net) / 10 lbs.
- > 0.9 power factor
- Air cooled, right to left air flow



EXACT-V2 Rear Panel

* Depending on standard final approval

ORDERING INFORMATION

Please contact your authorized Hitachi-Comark representative.
 US Sales 1-800-288-8364 or 413-998-1100
 Hitachi Kokusai Electric Comark LLC
 104 Feeding Hills Road
 Southwick, MA 01077

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www.comarktv.com

- EXACT-SNMP → Optional SNMP License
- EXACT-20DB → Optional +20dBm Output
- EXACT-A3UP → Upgrade ATSC 3.0 License (single PLP)
- EXACT-ALP3 → Upgrade ATSC 3.0 ALP Encapsulation

**ADDENDUM ONE,
REVISED INVITATION TO BID**

Date: December 14, 2018
To: All Bidders
From: Julie Dabydeen, Buyer
AS Materiel State Purchasing
RE: Addendum for Invitation to Bid Number 5970 OF REBID to be opened December 28,
2018 at 2:00 p.m. Central

REVISED INVITATION TO BID

Invitation to Bid dated December 12, 2018 is hereby deleted and replaced with Revised Invitation to Bid dated December 14, 2018

This addendum will become part of the ITB and should be acknowledged with the Invitation to Bid response.

ACKNOWLEDGED BY HITACHI-COMARIC

DEC 21, 2018

ADDENDUM TWO, QUESTIONS and ANSWERS

Date: December 21, 2018

To: All Bidders

From: Julie Dabydeen, Buyer
Materiel State Purchasing

RE: Addendum for Invitation to Bid Number 5970 OF Rebid to be opened December 28, 2018 at 2:00 p.m. Central Time

Questions and Answers

Following are the questions submitted and answers provided for the above mentioned Invitation to Bid. The questions and answers are to be considered as part of the Invitation to Bid. It is the Bidder's responsibility to check the State Purchasing Bureau website for all addenda or amendments.

<u>Question Number</u>	<u>ITB Section Reference</u>	<u>ITB Page Number</u>	<u>Question</u>	<u>State Response</u>
1.			It would be extremely helpful if the state could provide some feedback on bid rejection. It would greatly assist in putting together a competitive bid since every bid has been rejected multiple times.	The solicitation was rejected due to an error on Addendum Two indicating that the opening bid date was December 13, 2018, not December 7, 2018. 5970 OF REBID is a revised document that includes the most current specification changes, which is the reason for the multiple solicitations for this commodity.

This addendum will become part of the ITB and should be acknowledged with the Invitation to Bid response.

ACKNOWLEDGED BY HITACHI-COMARIL



DEC 21, 2018

STATE OF NEBRASKA

United States of America, } ss.
State of Nebraska }

Secretary of State
State Capitol
Lincoln, Nebraska

I, John A. Gale, Secretary of State of the
State of Nebraska, do hereby certify that

HITACHI KOKUSAI ELECTRIC COMARK LLC

a limited liability company is authorized to transact business in Nebraska;

**all fees, taxes, and penalties due under the Nebraska Uniform Limited
Liability Company Act or other law to the Secretary of State have been paid;**

**the Company's most recent biennial report required by section 21-125 has
been filed by the Secretary of State;**

**the Secretary of State has not revoked the Company's Certificate of Authority
and has not filed a notice of cancellation.**

*This certificate is not to be construed as an endorsement,
recommendation, or notice of approval of the entity's financial
condition or business activities and practices.*

In Testimony Whereof,

I have hereunto set my hand and
affixed the Great Seal of the
State of Nebraska on this date of

November 28, 2018



John A. Gale
Secretary of State