REQUEST FOR PROPOSAL

RFP COVER SHEET

Administrative Information

RFP Number	005-RFP-1745-2025	Title of RFP	Iowa PBS VHF Transmitter Upgrades		
Agency	Iowa Department of Administrative Services (DAS) on behalf of Iowa Public Broadcasting.				
Available to other State agencies?			No		
Available to Political Subdivisions?			No		
Available to other States or governmental entities outside of the State of Iowa?			No		

State Issuing Officer:

Michael Bradbury Phone: 515-823-9327

E-mail: Michael.Bradbury@iowa.gov

PROCUREMENT TIMETABLE—Event or Action Date/Time (Central Time)					
State Posts Notice of RFP on the TSB website	5-17-2025				
State Issues RFP	5-19-2025				
RFP written questions, requests for clarification, and suggested changes	6-6-2025 at 2:00pm (CT)				
from Respondents due	0-0-2023 at 2.00pm (C1)				
Site Visit Location and Address:					
KDIN	C 2 2025 to C 5 2025				
199 NE 180 th St.	6-2-2025 to 6-5-2025				
Alleman, IA. 50007	*Must be scheduled				
If a map is needed, contact the Issuing Officer.	through issuing officer*				
Site Visit is Optional					
Site Visit Location and Address:					
KIIN	6 2 2025 +- 6 5 2025				
1560 Baker Ave.	6-2-2025 to 6-5-2025				
West Branch, IA. 52358	*Must be scheduled				
If a map is needed, contact the Issuing Officer.	through issuing officer*				
***Site Visit is Optional ***					
Follow-up RFP written questions, requests for clarification, and					
suggested changes from Respondents due (no questions accepted or	6-18-2025 at 2:00pm (CT)				
responded to after this date)					
Proposals Due	6-27-2025 at 2:00pm (CT)				

Relevant Websites

Internet website where the Addenda to this RFP will be posted http://bidopportunities.iowa.gov and IMPACS Electronic Procurement System.

Internet website where contract terms and conditions are posted

https://das.iowa.gov/sites/default/files/procurement/pdf/050116%20terms%20services.pdf https://das.iowa.gov/sites/default/files/procurement/pdf/050116%20terms%20goods.pdf

Firm Proposal Terms

The minimum number of days following the deadline for submitting proposals that the Respondent guarantees all proposal terms, including price, will remain firm during the duration of the first year.

SECTION 1 INTRODUCTION

1.1 Purpose

The purpose of this Request for Proposals (RFP) is to solicit proposals from Responsible Respondents to provide the goods and/or services identified on the RFP cover sheet and further described in Section 4 of this RFP to the Agency identified on the RFP cover sheet. The Agency intends to award a Contract(s) for the initial period identified on the RFP cover sheet, and the Agency, in its sole discretion, may extend the Contract(s) for up to the number of annual extensions identified on the RFP cover sheet.

1.2 Definitions

For the purposes of this RFP and the resulting contract, the following terms shall mean:

"Agency" means the agency identified on the RFP cover sheet that is issuing the RFP and any other agency that purchases from the Contract.

"Contract" means the contract(s) entered into with the successful Respondent(s) as described in Section 6.1.

"Contractor" means the awarded business/person to provide the contractual services agreed upon.

"Deliverable" means the completion of a milestone or accomplishment of a task.

"General Terms and Conditions" means the General Terms and Conditions for Services Contracts as referenced on the RFP cover page.

"Proposal" means the Respondent's proposal submitted in response to the RFP.

"Respondent" means the company, organization or other business entity submitting a proposal in response to this RFP.

"Responsible Respondent" means a Respondent that has the capability in all material respects to perform the scope of work and specifications of the Contract. In determining whether a Respondent is a Responsible Respondent, the Agency may consider various factors including, but not limited to, the Respondent's competence and qualifications to provide the goods or services requested, the Respondent's integrity and reliability, the past performance of the Respondent and the best interest of the Agency and the State.

"Responsive Proposal" means a Proposal that complies with the material provisions of this RFP.

"RFP" means this Request for Proposals and any attachments, exhibits, schedules or addenda hereto.

"State" means the State of Iowa, the Agency, and all state agencies, boards, and commissions, and any political subdivisions making purchases from the Contract as permitted by this RFP.

1.3 Overview of the RFP Process

This RFP is designed to provide Respondents with the information necessary for the preparation of competitive Proposals. The RFP process is for the Agency's benefit and is intended to provide the Agency with competitive information to assist in the selection process. It is not intended to be comprehensive. Each Respondent is responsible for determining all factors necessary for the submission of a comprehensive Proposal.

Respondent should review Request for Confidentiality, for more information if its Proposal contains confidential information. Any Proposal marked "Confidential" or "Proprietary" on every page may be disqualified.

It is the Agency's intention to evaluate Proposals from all Respondents that submit timely Responsive Proposals, and award the Contract(s) in accordance with the evaluation and selection criteria provided in this RFP.

1.4 Objectives

The purpose of this RFP is to solicit proposals from qualified bidders to establish a multi-year buying agreement for the purchase of two (2) new VHF television transmitters for Iowa PBS (an agency of the State of Iowa). This agreement would set pricing for the purchase of equipment, installation, support and training. Iowa PBS is preparing to purchase products that meet the requirements identified below, in other exhibits and in the RFP in its entirety.

The final intent of this RFP is to award a contract(s) to responsible bidder(s) whose proposal(s) are conforming to this RFP and is most advantageous to the State in terms of price and other factors as defined in this RFP. Multiple proposals from a single Respondent are permitted.

Each system purchased will be site specific and shall be a complete package sourced to lowa PBS from the winning manufacturer/Respondent. It is also the expectation of lowa PBS that monetary savings will occur using an agreement through a single contract to supply these transmitter systems (versus a separate contract for each site). Contracts from multiple Respondents may be signed from this process to provide flexibility when placing future orders.

Each new transmitter is expected to be commissioned ATSC-1, and must be capable of operating NextGenTV (ATSC-3) transmission protocols at a later date via software updates only.

All proposals must include full documentation and complete physical layouts for each site as appropriate.

1.5 Background

The lowa PBS staff has determined that the current high-power VHF television transmitters (KDIN-TV and KIIN-TV are at the end of their serviceable life. The manufacturer of those transmitters has previously announced an end-of-life date that has passed and support is limited due to the availability of spare parts for these transmitters. With that in mind, Iowa PBS is requesting proposals for the replacement of each full power transmitter and all of its ancillary hardware. All proposed systems shall begin at the inputs of redundant exciters and end at the unpressurized side of the existing station gas-stop barrier.

Proposed systems shall meet the requirements in the RFP specification documents and contain all components necessary to meet FCC rules and industry standards.

Ideally, all similar transmitter systems purchased will use the same model of power supplies, amplifiers, control boards, monitoring boards, etc. This configuration will allow lowa PBS great flexibility to interchange parts and stock fewer spares in inventory. Preference will be given to proposals meeting this objective along with other items listed in paragraph 3.19 SCORED ITEMS.

More detailed and site-specific information is located in Section 4.3 (SPECIFIC TRANSMITTER LOCATION AND TECHNICAL INFORMATION) of the RFP. Due to exact funding commitments, construction timelines and sequencing the installation of these systems, the delivery dates of each site will likely be different (and mutually agreed to) by any winning manufacturer/Respondent and Iowa PBS, after the award of any contracts(s) to purchase. Negotiated delivery times will be consistent with required fabrication lead-times, but not to exceed 180 days.

Any errors or omissions in the specifications that are discovered by the responding parties shall be brought to the attention of the issuing officer in writing by June 6, 2025 for possible correction by RFP Amendment.

SECTION 2 ADMINISTRATIVE INFORMATION

2.1 Issuing Officer

The Issuing Officer identified in the RFP cover sheet is the sole point of contact regarding the RFP from the date of issuance until a Notice of Intent to Award the Contract is issued.

2.2 Restriction on Communication

From the issue date of this RFP until a Notice of Intent to Award the Contract is issued, Respondents may contact only the Issuing Officer. The Issuing Officer will respond only to written questions regarding the procurement process. Questions related to the interpretation of this RFP must be submitted as provided in Section 2. Oral questions related to the interpretation of this RFP will not be accepted. Respondents may be disqualified if they contact any State employee other than the Issuing Officer about the RFP except that Respondents may contact the State Targeted Small Business Office on issues related to the preference for Targeted Small Businesses.

This section shall not be construed as restricting communications related to the administration of any contract currently in effect between a Respondent and the State.

2.3 Downloading the RFP from the Internet

The RFP and any addenda to the RFP will be posted at http://bidopportunities.iowa.gov/ and IMPACS Electronic Procurement System. The Respondent is advised to check the website periodically for addenda to this RFP, particularly if the Respondent downloaded the RFP from the Internet as the Respondent may not automatically receive addenda. It is the Respondent's sole responsibility to check daily for addenda to posted documents.

2.4 Procurement Timetable

The dates provided in the procurement timetable on the RFP cover sheet are provided for informational and planning purposes. The Agency reserves the right to change the dates. If the Agency changes any of the deadlines for Respondent submissions, the Agency will issue an addendum to the RFP.

2.5 Questions, Requests for Clarification, and Suggested Changes

Respondents are invited to submit written questions and requests for clarification regarding the RFP. Respondents may also submit suggestions for changes to the specifications of this RFP. The questions, requests for clarifications, or suggestions must be in IMPACS on or before the date and time listed. Oral questions will not be permitted. If the questions, requests for clarifications, or suggestions pertain to a specific section of the RFP, Respondent shall reference the page and section number(s). The Agency will post written responses to questions, requests for clarifications, or suggestions received from Respondents in IMPACS.

The Agency assumes no responsibility for oral representations made by its officers or employees unless such representations are confirmed in writing and incorporated into the RFP through an addendum.

2.6 Amendment to the RFP

The Agency reserves the right to amend the RFP at any time using an addendum. The Respondent shall acknowledge receipt of all addenda in its Proposal. If the Agency issues an addendum after

the due date for receipt of Proposals, the Agency may, in its sole discretion, allow Respondents to amend their Proposals in response to the addendum.

2.7 Amendment and Withdrawal of Proposal

The Respondent may amend or withdraw and resubmit its Proposal at any time before the Proposals are due. The proposal must be updated and submitted using IMPACS. Electronic mail and faxed amendments will not be accepted. Respondents must notify the Issuing Officer in writing prior to the due date for Proposals if they wish to completely withdraw their Proposals.

2.8 Submission of Proposals

Respondent must submit Proposal in the State's <u>IMPACS Electronic Procurement System</u> before the "Proposals Due" date and time listed on the RFP cover sheet. **This is a mandatory specification and will not be waived by the Agency. Any Proposal received after this deadline will be rejected and returned unopened to the Respondent.** Respondents sending Proposals must allow ample upload time to ensure timely receipt of their Proposals. It is the Respondent's responsibility to ensure that the Proposal is received prior to the deadline. Electronic mail and faxed Proposals will not be accepted. There is a 50MB per file size limitation, but no limit to number of files. Plan accordingly.

Respondents must furnish all information necessary to enable the Agency to evaluate the Proposal. Oral information provided by the Respondent will not be considered part of the Respondent's Proposal unless it is reduced to writing.

2.9 Proposal Opening

The Agency will open Proposals after the deadline for submission of Proposals has passed. The Proposals will remain confidential until the Agency has issued a Notice of Intent to Award a Contract. <u>See Iowa Code Section 72.3</u>. However, the names of Respondents who submitted timely Proposals will be publicly available after the Proposal opening. The announcement of Respondents who timely submitted Proposals does not mean that an individual Proposal has been deemed technically compliant or accepted for evaluation.

2.10 Costs of Preparing the Proposal

The costs of preparation and delivery of the Proposal are solely the responsibility of the Respondent.

2.11 No Commitment to Contract

The Agency reserves the right to reject any or all Proposals received in response to this RFP at any time prior to the execution of the Contract. Issuance of this RFP in no way constitutes a commitment by the Agency to award a contract.

2.12 Rejection of Proposals

The Agency may reject outright and not evaluate a Proposal for reasons including, without limitation:

2.12.1 The Respondent fails to deliver the Cost Proposal as a separate file.

- **2.12.2** The Respondent acknowledges that a mandatory specification of the RFP cannot be met.
- **2.12.3** The Respondent's Proposal changes a material specification of the RFP or the Proposal is not compliant with the mandatory specification of the RFP.
- **2.12.4** The Respondent's Proposal limits the rights of the Agency.
- **2.12.5** The Respondent fails to include information necessary to substantiate that it will be able to meet a specification of the RFP as provided in Section 4 of the RFP.
- **2.12.6** The Respondent fails to timely respond to the Agency's request for information, documents, or references.
- **2.12.7** The Respondent fails to include proposal security, if required.
- **2.12.8** The Respondent fails to include any signature, certification, authorization, stipulation, disclosure or guarantee as provided in Section 4 of this RFP.
- **2.12.9** The Respondent presents the information requested by this RFP in a format inconsistent with the instructions of the RFP or otherwise fails to comply with the specifications of this RFP.
- **2.12.10** The Respondent initiates unauthorized contact regarding the RFP with a State employee other than the Issuing Officer.
- **2.12.11** The Respondent provides misleading or inaccurate responses.
- **2.12.12** The Respondent's Proposal is materially unbalanced. A Proposal in which line item prices are structured so that it is possible that the Respondent who appears to be low will not end up having the lowest overall cost to the State, due to high prices on particular line items.
- **2.12.13** There is insufficient evidence (including evidence submitted by the Respondent and evidence obtained by the Agency from other sources) to satisfy the Agency that the Respondent is a Responsible Respondent.
- **2.12.14** The Respondent is a "scrutinized company" included on a "scrutinized company list" created by a public fund pursuant to Iowa Code section 12J.3.

2.13 Nonmaterial Variances

The Agency reserves the right to waive or permit cure of nonmaterial variances in the Proposal if, in the judgment of the Agency, it is in the State's best interest to do so. Nonmaterial variances include but are not limited to, minor failures to comply that: do not affect overall responsiveness, are merely a matter of form or format, do not change the relative standing or otherwise prejudice other Respondents, do not change the meaning or scope of the RFP, or do not reflect a material change in the specifications of the RFP. In the event the Agency waives or permits cure of nonmaterial variances, such waiver or cure will not modify the RFP specifications or excuse the

Respondent from full compliance with RFP specifications or other Contract specifications if the Respondent is awarded the Contract. The determination of materiality is in the sole discretion of the Agency.

2.14 Reference Checks

The Agency reserves the right to contact any reference to assist in the evaluation of the Proposal, to verify information contained in the Proposal and to discuss the Respondent's qualifications and the qualifications of any subcontractor identified in the Proposal.

2.15 Information from Other Sources

The Agency reserves the right to obtain and consider information from other sources concerning a Respondent, such as the Respondent's capability and performance under other contracts, the qualifications of any subcontractor identified in the Proposal, the Respondent's financial stability, past or pending litigation, and other publicly available information.

2.16 Verification of Proposal Contents

The content of a Proposal submitted by a Respondent is subject to verification. If the Agency determines in its sole discretion that the content is in any way misleading or inaccurate, the Agency may reject the Proposal.

2.17 Proposal Clarification Process

The Agency reserves the right to contact a Respondent after the submission of Proposals for the purpose of clarifying a Proposal. This contact may include written questions, interviews, site visits, a review of past performance if the Respondent has provided goods and/or services to the State or any other political subdivision wherever located, or requests for corrective pages in the Respondent's Proposal. The Agency will not consider information received from or through Respondent if the information materially alters the content of the Proposal or the type of goods and/or services the Respondent is offering to the Agency. An individual authorized to legally bind the Respondent shall sign responses to any request for clarification. Responses shall be submitted to the Agency within the time specified in the Agency's request. Failure to comply with requests for additional information may result in the rejection of the Proposal.

2.18 Disposition of Proposals

All Proposals become the property of the State and shall not be returned to the Respondent. Once the Agency issues a Notice of Intent to Award the Contract, the contents of all Proposals will be public records and be available for inspection by interested parties, except for information for which Respondent properly requests confidential treatment according to exceptions provided in *Iowa Code Chapter 22* or other applicable law.

2.19 Public Records and Requests for Confidential Treatment

The Agency's release of public records is governed by Iowa Code Chapter 22. Respondents are encouraged to familiarize themselves with Chapter 22 before submitting a Proposal. The Agency will copy and produce public records upon request as required to comply with Chapter 22 and will treat all information submitted by a Respondent as non-confidential records unless the Respondent requests specific parts of the Proposal be treated as confidential at the time of the submission as set forth herein **AND** the information is confidential under lowa or other applicable law.

2.20 Copyright Permission

By submitting a Proposal, the Respondent agrees that the Agency may copy the Proposal for purposes of facilitating the evaluation of the Proposal or to respond to requests for public records. By submitting a Proposal, the Respondent consents to such copying and warrants that such copying will not violate the rights of any third-party. The Agency shall have the right to use ideas or adaptations of ideas that are presented in Proposals.

2.21 Release of Claims

By submitting a Proposal, the Respondent agrees that it will not bring any claim or cause of action against the Agency or the State based on Respondent's misunderstanding concerning the information provided in the RFP or concerning the Agency's or the State's failure, negligent or otherwise, to provide the Respondent with complete, pertinent, or accurate information in this RFP, or for any failure to provide information that any Respondent might consider relevant for purposes of making a decision to submit a Proposal or to enter into any Contract resulting from this RFP.

2.22 Respondent Presentations

Respondents may be required to make a presentation. The determination as to need for presentations, and the location, order, and schedule of the presentations is at the sole discretion of the Agency. The presentation may include slides, graphics and other media selected by the Respondent to illustrate the Respondent's Proposal. The presentation shall not materially change the information contained in the Proposal.

2.23 Evaluation of Proposals Submitted

Proposals that are timely submitted and are not rejected will be reviewed in accordance with Section 5 of the RFP. The Agency will not necessarily award a Contract resulting from this RFP to the Respondent offering the lowest cost. Instead, the Agency will award the Contract(s) to the Responsible Respondent(s) whose Responsive Proposal the Agency believes will provide the best value to the Agency and the State.

2.24 Award Notice and Acceptance Period

Notice of Intent to Award the Contract(s) will be sent to all Respondents submitting a timely Proposal and may be posted at the website shown on the RFP cover sheet. Negotiation and execution of the Contract(s) shall be completed no later than thirty (30) days from the date of the Notice of Intent to Award or such other time as designated by the Agency. If the successful Respondent fails to negotiate and deliver an executed Contract by that date, the Agency, in its sole discretion, may cancel the award and award the Contract to the remaining Respondent the Agency believes will provide the best value to the State.

2.25 No Contract Rights until Execution

No Respondent shall acquire any legal or equitable rights regarding the Contract unless and until the Contract has been fully executed by the successful Respondent and the Agency.

2.26 Choice of Law and Forum

This RFP and the Contract shall be governed by the laws of the State of Iowa. Changes in applicable laws and rules may affect the award process or the Contract. Respondents are responsible for ascertaining pertinent legal requirements and restrictions. Any and all litigation or actions commenced in connection with this RFP shall be brought in the appropriate Iowa forum.

2.27 Preference

By virtue of statutory authority, a preference will be given to products and provisions grown and coal produced within the state of lowa. Preference application: Tied responses to solicitations, regardless of the type of solicitation, are decided in favor of lowa products and lowa-based businesses per 11 IAC 117.5(1)-(2), 117.12(4).

2.28 Restrictions on Gifts and Activities

Iowa Code Chapter 68B restricts gifts which may be given or received by State employees and requires certain individuals to disclose information concerning their activities with State government. Respondents are responsible to determine the applicability of this Chapter 68B to their activities and to comply with its requirements. In addition, pursuant to *Iowa Code section 722.1*, it is a felony offense to bribe or attempt to bribe a public official.

2.29 No Minimum Guaranteed

The Agency does not guarantee any minimum level of purchases under the Contract.

2.30 Post Solicitation Debriefing

A debriefing is available to any Respondent who submitted a proposal in response to this RFP. Respondent shall submit a written request for a debriefing to the Issuing Officer via email or other delivery method. All Respondents will be accorded fair and equal treatment with respect to its opportunity for debriefing. The debriefing shall be scheduled by the Agency as soon as practicable after the receipt of debriefing request.

2.31 Appeals

A Respondent whose Proposal has been timely filed and who is aggrieved by the Notice of Intent to Award of the Department may appeal the decision by emailing a written notice of appeal (in accordance with 11—Chapter 117.20, Iowa Administrative Code) to the Director of the Department of Administrative Services and carbon copy to the Issuing Officer. The notice must be filed within five (5) days of the date of the Notice of Intent to Award issued by the Department, exclusive of Saturdays, Sundays, and legal state holidays. The written notice may be filed by fax transmission to 515.725.2064. The notice of appeal must clearly and fully identify all issues being contested by reference to the page, section and line number(s) of the RFP and/or the Notice of Intent to Award. A notice of appeal may not stay negotiations with the apparent successful Respondent.

SECTION 3 FORM AND CONTENT OF PROPOSALS

3.1 Instructions

These instructions describe and define the format and content of the Proposal. They are designed to facilitate a uniform review process. Failure to adhere to the Proposal format may result in the rejection of the Proposal.

3.1.1 The Proposal shall be divided into two parts: (1) the Technical Proposal and (2) the Cost Proposal. The Technical Proposal and the Cost Proposal shall be labeled as such as separate files. The files shall be labeled with the following information:

005-RFP-1745-2025 - Respondent Name - Technical Proposal 005-RFP-1745-2025 - Respondent Name - Cost Proposal

- **3.1.2** Files must be attached to Respondents submission in the State's <u>IMPACS Electronic</u> <u>Procurement System.</u>
- 3.1.3 If the Respondent designates any information in its Proposal as confidential pursuant to Section 2, the Respondent must also submit public copy Proposal from which confidential information has been excised as provided in Section 2 and which is marked "Public Copy".

 005-RFP-1745-2025 Respondent Name Public Copy
- **3.1.4** Proposals shall not contain promotional or display materials.
- **3.1.5** Attachments shall be referenced in the Proposal.
- **3.1.6** If a Respondent proposes more than one solution to the RFP specifications, each shall be labeled and submitted in a separate Proposal and each will be evaluated separately.

3.2 Technical Proposal

Any information provided in the Technical Proposal is subject to consideration for consideration, evaluation, and scoring. The following documents and responses shall be included in the Technical Proposal in the order given below:

Exhibit 1 - Transmittal Letter (Required)

An individual authorized to legally bind the Respondent shall sign the transmittal letter. The letter shall include the Respondent's mailing address, electronic mail address, fax number, and telephone number.

Exhibit 2 - Executive Summary

The Respondent shall prepare an executive summary and overview of the goods and/or services it is offering, including all of the following information:

- Statements that demonstrate that the Respondent has read and understands the terms and conditions of the RFP including the Contract provisions in Section 6.
- An overview of the Respondent's plans for complying with the specifications of this RFP.
- Any other summary information the Respondent deems to be pertinent.

Exhibit 3 - Firm Proposal Terms

The Respondent shall guarantee in writing the goods and/or services offered in the Proposal are currently available and that all Proposal terms, including price, will remain firm for the number days indicated on the RFP cover sheet following the deadline for submitting Proposals.

Exhibit 4 - Respondent Background Information

The Respondent shall provide the following general background information:

- Does your state have a preference for instate Contractors? Yes or No. If yes, please include the details of the preference.
- Name, address, telephone number, fax number and e-mail address of the Respondent including all d/b/a's or assumed names or other operating names of the Respondent and any local addresses and phone numbers.
- Form of business entity, e.g., corporation, partnership, proprietorship, or LLC.
- State of incorporation, state of formation, or state of organization.
- The location(s) including address and telephone numbers of the offices and other facilities that relate to the Respondent's performance under the terms of this RFP.
- Number of employees.
- Type of business.
- Name, address and telephone number of the Respondent's representative to contact regarding all contractual and technical matters concerning the Proposal.
- Name, contact information and qualifications of any subcontractors who will be involved with this project the Respondent proposes to use and the nature of the goods and/or services the subcontractor would perform.
- Respondent's accounting firm.
- Awarded Respondent will be required to register to do business in Iowa before payments can be made.
- For Contractor registration documents, go to: https://das.iowa.gov/procurement/vendors/how-do-business

Exhibit 5 - Experience

The Respondent must provide the following information regarding its experience:

- Number of years in business.
- Number of years of experience with providing the types of services sought by the RFP.
- The level of technical experience in providing the types of services sought by the RFP.
- A list of all goods and/or services similar to those sought by this RFP that the Respondent has provided to other businesses or governmental entities.
- Letters of reference from three (3) previous or current customers or clients knowledgeable of the Respondent's performance in providing goods and/or services similar to the goods and/or services described in this RFP and a contact person and telephone number for each reference.

Exhibit 6 - Termination, Litigation, and Debarment

The Respondent must provide the following information for the past five (5) years:

- Has the Respondent had a contract for goods and/or services terminated for any reason? If so, provide full details regarding the termination.
- Describe any damages or penalties assessed against or dispute resolution settlements entered into by Respondent under any existing or past contracts for goods and/or services. Provide full details regarding the circumstances, including dollar amount of damages, penalties and settlement payments.

- Describe any order, judgment or decree of any Federal or State authority barring, suspending or otherwise limiting the right of the Respondent to engage in any business, practice or activity.
- A list and summary of all litigation or threatened litigation, administrative or regulatory proceedings, or similar matters to which the Respondent or its officers have been a party.
- Any irregularities discovered in any of the accounts maintained by the Respondent on behalf of others. Describe the circumstances and disposition of the irregularities. Failure to disclose these matters may result in rejection of the Proposal or termination of any subsequent Contract. The above disclosures are a continuing requirement of the Respondent. Respondent shall provide written notification to the Agency of any such matter commencing or occurring after submission of a Proposal, and with respect to the successful Respondent, following execution of the Contract.

Exhibit 7 - Acceptance of Terms and Conditions

By submitting a Proposal, Respondent acknowledges its acceptance of the terms and conditions of the RFP and the General Terms and Conditions without change except as otherwise expressly stated in its Proposal. If the Respondent takes exception to a provision, it must identify it by page and section number, state the reason for the exception, and set forth in its Proposal the specific RFP or General Terms and Conditions language it proposes to include in place of the provision. If Respondent's exceptions or responses materially alter the RFP, or if the Respondent submits its own terms and conditions or otherwise fails to follow the process described herein, the Agency may reject the Proposal, in its sole discretion.

Exhibit 8 - Mandatory Specifications

The Respondent shall answer whether or not it will comply with each specification in Section 4 of the RFP. Where the context requires more than a yes or no answer or the specific specifications so indicates, Respondent shall explain how it will comply with the specification. Merely repeating the Section 4 specifications may be considered non-responsive and result in the rejection of the Proposal. Proposals must identify any deviations from the specifications of the RFP or specifications the Respondent cannot satisfy. If the Respondent deviates from or cannot satisfy the specification(s) of this section, the Agency may reject the Proposal.

Exhibit 9 – Equipment Description

Respondents shall provide detailed list(s) of requirements and specifications for the hardware on which system will run.

Exhibit 10 - Transmitters

Respondent must describe how transmitters meet ATSC-1 standards, and show that the transmitters are also capable of operating NextGenTV (ATSC-3) protocols at a later date via software updates only. Respondents shall describe all the steps and other requirements to perform this upgrade. Separate devices or outboard hardware for these upgrades are not permitted. Respondent shall also include the following:

- Transmitter installation drawings showing equipment locations and dimensions of the filter.
- Information that details the system, components, and information pertaining to the SNMP capabilities to monitoring and controlling the proposed transmitter.

Exhibit 11 - Mask Filters

Respondent shall describe the Mask Filter that will be supplied. Respondents shall include the following:

- Design characteristics and why that proposed solutions was chosen
- Mask filter electrical specifications, mechanical drawings, and dimensions of the filter.

Exhibit 12 - Heat-Load Calculation

Respondent must describe how it provides total system heat-load on all equipment proposed by the Respondent to room calculation for each installation.

Exhibit 13 – System Efficiency

Respondent shall describe how it provides total system efficiency. This shall include complete energy calculations at operating frequency and TPO. Show calculated monthly kWh loads.

Exhibit 14 – Power Amplification (PA)

Respondent shall fully describe the procedure and time required to replace a PA Module and its DC power supply.

Exhibit 15 - Implementation Plan

Describe recommended implementation strategy including on-site coordination and support services, best practice consulting options and professional services. Identify any third-party Respondents involved in Respondent's implementation strategy and describe these relationships. Describe the skills and time required by State of Iowa personnel for initial installation and implementation of the proposed system. Provide an estimate of State of Iowa staff time required to complete the installation. Describe the documentation provided with the product along with applicable costs for any additional documentation. Please describe Respondent's experience with installations similar in size. Please provide an implementation schedule, based on weekly milestones (not dates).

Exhibit 16 - Service and Maintenance

Provide detailed information on your customer service program and maintenance plans. Include response times and the access to and timeliness of service engineers.

Exhibit 17 - Warranty

Provide warranty documentation for your proposed solution. Describe your replacement parts program, costs, and turnaround time.

3.3 Cost Proposal

The Respondent shall provide its Cost Proposal in a separate file for the proposed goods and/or services. All prices are quoted pursuant to the terms and conditions of this RFP. Respondent's Cost Proposal shall include an all-inclusive, itemized, total cost in U.S. Dollars (including all travel, expenses, etc. in prices) for the proposed services. All pricing to be FOB Destination, freight cost, and all expenses included; and based on Net 60 Days Payment Terms. Cost proposals must include the following:

- Provide any one time and recurring costs for system. Recurring costs are to be for a 6-year period to cover initial term and extensions to contract.
- Equipment costs.
- Any other costs associated with proposed system.
- Pricing for options.

3.3.1 Respondent Discounts

Respondents shall state in their Cost Proposals whether they offer any payment discounts, including but not limited to:

3.3.1.1 Prompt Payment Discount

The State can agree to pay in less than sixty (60) days if an incentive for earlier payment is offered.

3.3.1.2 Cash Discount

The State may consider cash discounts when scoring Cost Proposals.

3.3.2 Ancillary Hardware to be Quoted

- 3.3.2.1 A primary AC voltage surge protection unit. This device shall be UL # 1449 listed (or better) and sized appropriately for all equipment being provided by the selected Respondent. The surge suppressor shall be an active device and not of an MOV design. A status indicator shall be provided to indicate a failure or serviceable condition.
- **3.3.2.2** Station nitrogen generator to charge the existing transmission line from the gas barrier to the broadcast antenna. Provide make and model number of selected devices for each transmitter site. Section 4.3 details the transmission line size and length. South-Tek Systems, LLC Nitrogen Generator system (or equivalent) is required.
- 3.3.2.3 All proposals shall contain technical information and pricing for a complete, installed and operational real-time RF monitoring system equal to or better than a Dielectric Inc. 'RF Hawkeye' product. This device must be configured, sized, and priced for each site individually. The KDIN site is a combined Channel 11/13 antenna fed with a dual run of 6" transmission line.

3.3.3 Options to be quoted

The manufacturer shall supply descriptions and costs of the following options:

- **3.3.3.1** A primary AC voltage regulator sized appropriately for all equipment being provided by the selected supplier. This cost shall be quote for each transmitter site. This regulator shall be equipped with individual phase controls and meters. A manual bypass switch must also be included with the voltage regulator all voltage phases and the neutral must be switchable to facilitate maintenance of the regulator.
- **3.3.3.2** Turn-key electrical installation from the facility existing electrical panels to the appropriate equipment locations.
- **3.3.3.3** The manufacturer shall list all levels of spare part kits, assemblies, modules, etc. available for all supplied products. Including the contents of the kits and the cost of each item.

- **3.3.3.4** The manufacturer accepts delivery and is responsible for the complete installation of all purchased equipment, with supervisory oversight from lowa PBS personnel.
- **3.3.3.5** Supply details and price for one on-channel band stop filter (for harmonic testing) for each site.
- **3.3.3.6** Respondent will include any additional items/options respondent feels would benefit each installation that was not included in the specification.

3.3.4 Alternate equipment to be quoted

- **3.3.4.1** Quote an alternate transmitter size for the KDIN location. Use same specifications in paragraph 4.3, except the 'Transmitter minimum output' information as ≥3.2kW.
- **3.3.4.2** Quote an alternate transmitter size for the KIIN location. Use same specifications in paragraph 4.3, except the 'Transmitter minimum output' information. Instead insert ≥6.5kW in this specification.

SECTION 4 SPECIFICATIONS

Overview

The successful Respondent shall provide the goods and/or services to the State in accordance with the specifications and technical specifications as provided in this Section. The Respondent shall address each specification in this Section and indicate whether or not it will comply with the specification. If the context requires more than a yes or no answer or the section specifically indicates, Respondent shall explain how it will comply with the specification. Proposals must address each specification. Merely repeating the specifications may be considered non-responsive and may disqualify the Respondent. Proposals must identify any deviations from the specifications of this RFP or specifications the Respondent cannot satisfy. If the Respondent deviates from or cannot satisfy the specification (s) of this section, the Agency may reject the Proposal.

All items listed in this section are Mandatory Specifications. Respondents must indicate either "yes" or "no" to each specification in their Proposals and provide an explanation as to how the specification is met. By indicating "yes" a Respondent agrees that it shall comply with that specification throughout the full term of the Contract, if the Respondent is successful. In addition, if specified by the specifications or if the context otherwise requires, the Respondent shall provide references and/or supportive materials to verify the Respondent's compliance with the specification. The Agency shall have the right to determine whether the supportive information and materials submitted by the Respondent demonstrate that the Respondent will be able to comply with the Mandatory Specifications. If the Agency determines the responses and supportive materials do not demonstrate the Supplier will be able to comply with the Mandatory Specifications, the Agency may reject the Proposal.

4.1 Scope of Work

- **4.1.1** The overall goal of this project is for the installation, support, and training on the replacement of two televisions transmitters at separate locations (Alleman, IA. and West Branch, IA.) through the establishment of a Master Agreement between the Respondent and the State of Iowa.
- **4.1.2** Systems will be site specific and a complete package from a single manufacturer/Respondent.
- **4.1.3** The new transmitters are expected to be commissioned ATSC-1, and must be capable of operating NextGenTV (ATSC-3).
- **4.1.4** Because of construction timelines and coordinating the installation of the system, the delivery date will be mutually agreed to by the manufacturer/Respondent and Iowa PBS. The negotiated delivery times will be consistent with preferred fabrication lead-times not to exceed 180 days.
- **4.1.5** The winning Respondent shall agree to assist station personnel in the removal of the existing transmitter(s) to make space available for new equipment.
- **4.1.6** The winning Respondent is responsible to remove all trash generated from a purchase contract (e.g. pallets, packing materials, demolished equipment, etc...).

4.2 Mandatory Manufacture Requirements

- **4.2.1** All equipment offered shall be new, of high-efficiency design providing at least 40% total efficiency at full operating power. All construction shall conform to best-established engineering practices and appropriate industry standards to assure a high degree of efficiency, performance, dependability and maintainability.
- **4.2.2** The transmitter shall provide high quality signals for the transmission of digital television in accordance with all applicable standards and recommendations for ATSC-1.
- **4.2.3** The equipment manufacturer of the proposed systems shall have been continuously manufacturing high power VHF television broadcast transmitters for a minimum of 15 years. A user's list of all television transmitters installed in the last 3 years shall be included with the response to this RFP. This list shall include transmitter model series, power level, modulation type, customer name and call sign.
- **4.2.4** Each transmitter shall be tested at the factory at full rated power and at Iowa PBS' requested operating power. This test data shall be recorded and supplied with the transmitter.
- **4.2.5** The transmitter shall be designed for unattended remote-control operation and shall be compatible with standard commercial parallel remote-control systems.
- **4.2.6** The exciter, driver amplifiers, power amplifiers, control system, PA cabinet(s) and overall system design shall be the product of a single manufacturer.
 - **4.2.6.1** The transmitter manufacturer shall have a customer service department available 24 hours a day, 365 days a year.
 - **4.2.6.2** The manufacturer shall employ a staff of full-time technical support engineers and field service staff capable of providing 24 hours a day, 365 days a year telephone consultation as well as on-site field service.
 - **4.2.6.3** The manufacturer shall provide a full complement of parts and technical service for a minimum of ten years after the sale of equipment.
- **4.2.7** The manufacturer shall provide sample installation, maintenance and operation manual(s) with the response to this RFP. Electronic .pdf format is preferred.
- **4.2.8** The transmitter manufacturer shall have a verifiable history of providing timely Service Bulletins to inform customers of modifications and improvements to transmitters and associated equipment. These bulletins shall also provide instruction manual updates as necessary.
- **4.2.9** To provide owners with the latest transmitter improvements, the transmitter manufacturer shall provide update kits as necessary.

- 4.2.10 The manufacturer shall warranty the transmitter to be free from defects in material and workmanship under normal use and service for a period of at least five years. This warranty/guarantee period shall begin on the day of transmitter acceptance by Iowa PBS. This acceptance day is the date the transmitter successfully passes its installed Proof of Performance tests and no other problems are known. If there are problems with the equipment prior to the Proof of Performance being completed, the warranty/guarantee period will not begin until such issues are resolved to the satisfaction of Iowa PBS. The obligation under all warranties shall be limited to the free replacement of defective components and the shipment of replacement parts to the purchaser, FOB factory. However, during this warranty period if Iowa PBS personnel feel it necessary, the manufacturer's Field Service Engineers/Technicians shall be dispatched to the transmitter site to assist in troubleshooting and repair at no cost to Iowa PBS. Standard published warranties shall apply to any item not identified with the transmitter manufacturer's trademark or trade name.
- **4.2.11** As part of this purchase, the manufacturer shall include full transmitter service, support and field updates with no additional fees incurred for a period of at least five (5) years.
- **4.2.12** As a demonstration of the manufacturer's commitment to quality, the manufacturer shall have the latest ISO registration (as of February 2025) and that registration shall be in good standing.
- **4.2.13** Each transmitter shall be supplied with four (4) sets of technical manuals and complete "as built" drawings. The manuals shall include three (3) hard copies and one (1) .pdf electronic version.

The manuals shall include, but not limited to the following:

- 1. Installation instructions
- 2. Set-up procedures
- 3. Complete set installation drawings, as well as a final set of as-built drawings
- 4. Operating procedures
- 5. Tuning procedures
- 6. Maintenance procedures
- 7. Troubleshooting procedures
- 8. Parts list with part number, circuit designator, description and generic number wherever possible
- 9. Wiring diagrams with wire designations
- 10. Circuit schematics with component designators and values
- 11. Module level and system level block diagrams
- 12. Component level and system level schematics with designators and values
- **4.2.14** All of the above transmitter manuals shall be supplied in English only. Multiple language manuals will NOT be accepted.

- **4.2.15** Prior to Iowa PBS's acceptance of each complete transmitter, the manufacturer shall allow (free of any charges) Iowa PBS Engineers the opportunity to witness the transmitters' final factory test and check out. The manufacturer must give at least fourteen (14) day notice of such tests. Iowa PBS will pay all travel and travel related costs for this factory visit.
- **4.2.16** The winning Respondent shall stock replacement parts at no less than one location in the USA to ensure readily available supplies.
- 4.2.17 Unloading and inside delivery of all equipment and materials shall be the responsibility of the manufacturer. All materials shall be shipped FOB to the appropriate transmitter site. All equipment and labor required to unload delivery trucks (i.e. forklift, pallet jack, dollies, etc.) shall be the responsibility of the successful manufacturer/Respondent.
- **4.2.18** Include all hardware and materials for a complete operable system installed in the building, tested and ready to broadcast. Iowa PBS will contract will local electrician(s) to connect the appropriate power to the winning Respondent's equipment as required, with guidance from the manufacturer/factory representatives.
- 4.2.19 As a part of this RFP and subsequent contract, the manufacturer shall provide all field service engineer/technician services required to perform the complete installation, onsite final checkout, Proof of Performance and commissioning of the entire transmission system. Before acceptance of the equipment, Respondent shall conduct a proof of performance test into the station dummy load to demonstrate compliance with FCC and ATSC standards. The field service engineer/technician shall be available at the appropriate time and for the length of time required for complete final system checkout. The engineer/technician shall be available to remain on site for as long as necessary to correct any problems which are the responsibility of the manufacturer. If extra time on site is required to correct the transmitter issue(s), there shall be no additional charges incurred to lowa PBS.
- 4.2.20 The manufacturer's on-site field service installation engineer/technician shall demonstrate to lowa PBS's engineers the proper operation of all modes of the transmitter and shall perform a detailed and complete proof of performance of all measurements. This proof of performance must be performed in the presence of lowa PBS Engineering personnel. The manufacturer shall submit the proof of performance in electronic and hard copy format. Three (3) hard copies shall be provided, as well as an electronic version in Microsoft Word or Adobe PDF format.
- **4.2.21** The entire cost of supplying factory technical personnel for installation, performing transmitter system checkout, proof of performance and commissioning shall be included in the price of the transmitter system.
- **4.2.22** The successful Respondent shall conduct training seminars (for the RFP supplied equipment) by manufacturer qualified personnel at least twice a year. Seminars shall include live transmitter hands-on training as well as theory/classroom instruction. All fees for this training shall include the site location, all training materials and supplies for two (2) lowa PBS employees, per transmitter purchased. These above-mentioned costs shall

be included in the RFP cost proposal. All staff travel, lodging and meals expenses will be the responsibility of Iowa PBS and separate from the RFP.

- **4.2.23** The manufacturer shall supply all necessary test equipment and tools to complete the installation, checkout and proof of performance.
- **4.2.24** All electronic components shall retain the labels of the original manufacturer. All parts lists shall include original manufacturer's names and part numbers for ease of replacement by Iowa PBS engineers.
- **4.2.25** Transmitter grounding shall be accomplished through bolted connections that were specifically designed for this use. All grounding connections shall end at the designated station grounds.

4.3 Specific Transmitter Location and Technical Information

NOTICE: It is the responsibility of the manufacturer (or manufacturer representative) to verify all frequencies and operating powers with Iowa PBS Engineering personnel before fabrication begins on any frequency or power dependent components.

All transmitters as factory tested and delivered shall be capable of operation in the currently available building electrical service as noted below in the specifications for each site. The two (2) transmission sites included in this specification are:

KDIN

Site Address 199 NE 180th St.
Site City Alleman, IA. 50007

TV Channel 11
ERP 22.5 kW
Transmitter power output (ATSC1) 2.60 kW
Transmitter minimum output (future Needs) 6.00 kW

Transmission Line 3-1/8" EIA (~4200')

ASR 1043707

Electrical Service 120/208Y 3-Phase, 4-Wire

Site/Delivery Directions I-35 Exit #96 (Elkhart/Polk City), then

approx. 1.5 miles West to US Hwy. 69 North on Hwy. 69 on mile to NE 199th Ave. West .75 mile. Site is to the North.

KIIN

Site address 1560 Baker Ave.

Site City/Zip West Branch, IA 52358

TV Channel 12
ERP 57 kW
Transmitter power output (ATSC-1) 5.04 kW
Transmitter minimum output (future needs) 8.00kW

Transmission line 3-1/8" EIA (~ 1500')

ASR 1026015

Electric Service 120/208Y 3-phase, 4-wire

Site/delivery directions

I-80 Exit 254 (West Branch), North .5 on S. Downey St, to W. Main St. Go 1 block West to N. Downey St. (County Rd X30). Go 3.5 mi North on X30. Site is on your right.

4.4 Transmitter General Specifications

- **4.4.1** The transmitters shall be type accepted or (type notified) with the FCC for the appropriate operating power.
- **4.4.2** The transmitters shall be of modular construction consisting of discrete functional cabinets. The cabinets shall be assembled, wired and tested in the manufacturer's plant to minimize assembly required during installation. Interconnection of transmitter cabinets shall be via factory fabricated cables and cable harnesses with factory installed plugs, connectors and terminations.
- **4.4.3** For easy identification during maintenance, all transmitter wiring shall have wire numbers at each termination.
- **4.4.4** The basic transmitter shall consist of the following modules:
 - **4.4.4.1** Transmitter system control cabinet.
 - **4.4.4.2** Heat exchanger system with isolated cooling coils, variable speed redundant pumps and fans (if required)
 - **4.4.4.3** Calibrated power measurement system including calibrated RF directional couplers in all appropriate test locations.
 - 4.4.4.4 Complete RF system, including low pass filters, appropriate mask filter and all interconnecting RF transmission lines, combiner, reject load(s) and test load. RF system shall begin at the input to the exciter and (for the purpose of this RFP) end at the unpressurized side of the station gas barrier.
- **4.4.5** Typical transmitter installation drawings showing equipment locations, dimensions, heat exchanger plumbing (if required), inside transmission line and AC power requirements shall be supplied with the RFP response.
- **4.4.6** Complete wiring and plumbing material for interconnecting all transmitter cabinet(s) and heat exchanger(s) for each specific transmitter site layout shall be provided by the transmitter manufacturer.
- **4.4.7** All signal inputs, RF sample connections and remote-control interconnect sockets shall be provided in conveniently located positions.

- **4.4.8** The appropriate harmonic filter shall be supplied with each transmitter order.
- **4.4.9** Internal GPS receiver (for timing reference) and antenna shall be included for each transmitter.
- **4.4.10** The transmitter shall be designed to comply with all current OHSA safety requirement.

4.5 Exciter/Driver

- **4.5.1** The exciter/driver must be designed, manufactured and fully supported by the transmitter manufacturer. Systems utilizing third part/OEM exciters/modulators are not allowed.
- **4.5.2** All exciters shall include standard input formats consisting of ASI, SMPTE-310M and TSoIP. Outboard converters are not permitted.
- **4.5.3** The exciter/driver shall utilize advanced real time adaptive pre-correction techniques in the digital domain. Fully automatic correction of both linear and non-linear distortions shall be performed simultaneously in a seamless and continuous manner. Manual adjustment of linear and non-linear distortions shall not be necessary.
- **4.5.4** For servicing and test/set-up purposes, it shall be possible to easily switch adaptive correction between different modes. Including, but not limited to:
 - **4.5.4.1** Normal (adaptive correction is enabled)
 - **4.5.4.2** Bypass (no active adaptive correction)
 - **4.5.4.3** Previous (last/former correction setting)
 - **4.5.4.4** Hold (current correction on-hold, no updating)
- **4.5.5** The system shall include a battery backup that keeps exciters fully powered in the event of short-term (≤ 5 minutes) power outages.

4.6 RF Power Amplifiers

- **4.6.1** All RF amplifier stages shall be 100% solid-state.
- **4.6.2** All system amplifiers shall operate across the USA television spectrum (band specific, VHF) without any hardware modifications.
- **4.6.3** Power Amplifiers shall be fully broadband across the high-band VHF-TV spectrum.

- **4.6.4** The PA modules shall produce the same average power level when used for ATSC 1.0 service and for ATSC 3.0 service (no reduction in power will be accepted).
- **4.6.5** No tuning, jumper changes, or other manual adjustments will be allowed when replacing any amplifier in any transmitter (of the same RF band) with a spare PA module. This allows a single spare amplifier to be easily used in any transmitter within its designed (UHF or VHF) band.
- **4.6.6** RF PA modules shall be easily removed and replaced during normal on-air operation of the transmitter. It shall not be necessary to reduce RF drive, remove cabinet power, or make any adjustments when replacing power amplifier modules.
- **4.6.7** All PA modules in any given transmitter shall be identical and interchangeable with no degradation in performance between modules.
- **4.6.8** For high on-air availability, parallel power amplifier modules shall be employed in all transmitter PA stages, ensuring a gradual reduction of RF power as PA modules are removed from service.
- **4.6.9** A single PA power supply failure shall have minimal effect on power amplifier output power. State the effect on PA power output due to the loss of one power supply in a two-power supply PA arrangement, and the loss of two supplies in a three-power supply arrangement.
- **4.6.10** All power amplifiers and their power supplies shall be hot swappable and without the need to power off or change operations of the equipment.
- **4.6.11** Each solid-state RF module shall have high-speed electronic self-protection circuitry and shall shut down in the event of one or more of the following fault conditions occurring:
 - **4.6.11.1** High VSWR
 - **4.6.11.2** RF input overdrive
 - **4.6.11.3** Over-temperature
 - **4.6.11.4** Over voltage
 - **4.6.11.5** Under voltage
 - **4.6.11.6** Transistor Over Current
- **4.6.12** Each PA Module DC Power Supply shall be protected against overload conditions, including, but not limited to the following:
 - **4.6.12.1** Over temperature
 - **4.6.12.2** Over voltage

4.6.12.3 Over current

4.7 Transmitter Control System

- **4.7.1** Overall transmitter system control, monitoring and diagnostic functions shall be accomplished using an intuitive high resolution, industrial grade, color Graphical User Interface (GUI) located in the system control cabinet.
- **4.7.2** HTML web GUI control and monitoring interface. Any remote PC, tablet, or mobile phone shall use a standard web browser (Edge, Chrome etc.) and not require any custom software.
- **4.7.3** All systems offered shall use the same model power supplies, amplifiers, control boards, monitoring boards, etc.
- **4.7.4** Remote control of the GUI system shall be possible via IP or Ethernet connection
- **4.7.5** Touch screen control via the GUI shall be used for all transmitter controls, monitoring and accessing all other displays and functions.
- **4.7.6** Basic status and telemetry indicators shall be visible on the front panel of the transmitter system.
- **4.7.7** Basic control functions shall be available using control buttons located on the front panel. These basic functions shall include at a minimum: Transmitter On/Off, Power Raise/Lower and Local/Remote Control.
- **4.7.8** The transmitter main controller shall be a reliable microprocessor-based design, using the latest technology and design techniques.
- **4.7.9** Backup (life support) controllers shall be capable of performing basic transmitter control and protection functions and must allow remote control of these basic functions.
- **4.7.10** It shall be possible to manually enable the amplifier cabinet, in the event of a malfunction of the main logic controller or disconnection of the control bus between the main and cabinet logic circuits.
- **4.7.11** Communication from the backup controller to the PA cabinet(s) shall be via hard-wired interface.
- **4.7.12** Connection to standard dry contact closure/parallel remote-control equipment or serial remote-control equipment shall require no additional interface components or transmitter modifications. All remote-control connections shall be via industry standard connectors located in the transmitter cabinets.

At a minimum these controls must include:

4.7.12.1 Transmitter On/Off

- **4.7.12.2** Transmitter Power Raise/Lower
- **4.7.12.3** Exciter Switch
- **4.7.12.4** Fault Reset
- **4.7.13** In addition to dry contact closures, SNMP control opportunities is expected.
- **4.7.14** GUI monitoring (Local and Remote) and control of the heat exchanger and pumps is required.
- **4.7.15** The parallel remote-control circuitry of the transmitter shall directly interface with currently manufactured industry standard remote-control systems without requiring additional interface components.
- **4.7.16** At a minimum, the following parameters shall be monitored and be available for display on the transmitter control/monitoring system:
 - **4.7.16.1** Transmitter total output power (pre-mask and post-mask)
 - **4.7.16.2** Transmitter total VSWR/Reflected Power
 - **4.7.16.3** Individual PA cabinet output power
 - **4.7.16.4** Individual PA cabinet VSWR/Reflected Power
 - **4.7.16.5** IPA drive power
 - 4.7.16.6 Reject load power
 - **4.7.16.7** System interlock status
 - **4.7.16.8** All system overloads
 - **4.7.16.9** Power supply(s) voltages and currents
 - **4.7.16.10** Block diagrams and photos of all major subassemblies to aid in fault location
 - **4.7.16.11** AC line voltages
 - **4.7.16.12** Phase loss status

These indications must be available as discrete status ground source connections and 0-5vdc analog voltages for all telemetry/metering functions as appropriate.

- **4.7.17** As a diagnostic aid, a summary of active and inactive fault conditions shall be stored and available for view on the transmitter control panel. A minimum of 100 separate faults shall be kept in the fault summary, with date, time and fault description.
- **4.7.18** Automatic VSWR fold back circuitry shall be provided, allowing uninterrupted operation at reduced power. If VSWR rises, the transmitter control circuitry shall proportionally reduce output power to maintain the highest safe operating levels. Decreasing VSWR conditions shall cause any power reductions to proportionally increase until the original output power is restored.
- **4.7.19** Battery backup of the control logic memory, or non-volatile memory shall be provided to ensure that the transmitter will return to its previous mode of operation immediately preceding an AC power failure of any duration.
- **4.7.20** An uninterruptable Power Supply (UPS) shall be provided to supply power to the transmitter Graphical User Interface (GUI) for a period of at least 30 minutes.

4.8 Power Amplifier Cabinets

- **4.8.1** Circuit assemblies and hardware shall be removable from the front of the transmitter with the minimum of disconnects.
- **4.8.2** Each amplifier path shall incorporate an Automatic Gain Control (AGC) circuit. The AGC circuitry shall automatically compensate for normal temperature versus gain variations of amplifiers, thereby allowing cold turn-on of the transmitter without any possibility of accidental RF overdrive.
- **4.8.3** For operator comfort and safety, the maximum ambient acoustic noise level permitted shall be <65dbA measured at a point 36 inches in front of the transmitter and 36 inches above floor level.

4.9 Heat Exchanger (If Required)

- **4.9.1** For optimum reliability and freedom from freeze damage during low ambient temperature conditions, water-glycol (or other lowa PBS approved systems) heat exchanger system shall be used. The cooling system shall include but not limited to the following:
 - **4.9.1.1** Dual pumps with local/remote changeover (manual and automatic)
 - **4.9.1.2** Particulate filter
 - **4.9.1.3** Isolation valves for each pump and amplifier cabinet inlet/outlet
 - **4.9.1.4** Temperature and flow sensors

- **4.9.1.5** Test and reject load cooling (as applicable)
- **4.9.1.6** Pressure gauges
- **4.9.1.7** Coolant storage tank with fluid level gauge
- **4.9.1.8** Interlocks for the test and reject load flow
- **4.9.1.9** Interlock for coolant reservoir level
- **4.9.1.10** Dual redundant variable speed pumps and heat exchanger fans including auto fail-over to the off-line system (if required).
- **4.9.2** The outdoor liquid-to-air heat exchanger shall be a commercial grade unit with variable speed cooling fans that work in conjunction with fluid temperature and pump speed to assist in maintaining a consistent temperature of coolant and contribute to energy savings.
- **4.9.3** The redundant cooling pumps shall auto-switch on failure of any operational pump. The pumps shall be commercial grade and work in conjunction with item 'B' above.
- **4.9.4** The heat exchanger system shall have the capacity and necessary hardware required to cool the transmitter (and test load, if applicable) at full rated power indefinitely.

4.10 RF Systems

- **4.10.1** All RF system components from the output connector of the transmitter, up to the gas barrier at the output of the building RF system shall be supplied by the manufacturer.
- **4.10.2** All RF system components shall be manufactured by the same company.
- **4.10.3** The RF system shall be of rigid coaxial and/or waveguide construction. RF inputs and outputs shall be standard EIA coaxial flanges or the appropriate waveguide configuration.
- **4.10.4** As required, both an FCC compliant mask and band-pass filter shall be supplied with the transmitters. The filters shall use a means of temperature compensation to minimize frequency drift with varying temperature.
- **4.10.5** Any purchase shall include all necessary reject loads and transmitter/station dummy load(s) capable of operating indefinitely at full rated power of its connected transmitter.
- **4.10.6** Maximum filter group delay shall not exceed 150nSec across the 6MHz channel, over the ambient room temperature range of 0°C to +45°C.
- **4.10.7** The RF system shall be supplied with a 4-port motorized waveguide switch and test load rated to support full transmitter power output levels.

- **4.10.8** The RF System shall include a calibrated probe with \geq +/- 0.1dB accuracy, to allow the use of an external RF power meter for power calibration.
- **4.10.9** The RF system supplied shall be rated to safely handle not less than 110% of the rated transmitter average power levels.
- **4.10.10** Additional forward and reverse directional couplers shall be provided by the manufacturer for use by Iowa PBS directly at the output of the transmitter, any combiner (where applicable) and at the input and output of the Respondent supplied System. These couplers shall be for the exclusive use of Iowa PBS and not part of the day-to-day operation/monitoring of the transmission system.

4.11 RF Specifications

- **4.11.1** Power Output: Site specific. See Section 4.3: "Specific Transmitter Site Information"
- **4.11.2** Frequency Range: Any specified FCC Channel VHF 2 13 (54 MHz 216 MHz)
- **4.11.3** RF Output:

• Impedance: 50 Ohms

• Connector EIA flanged (size as required)

4.12 INPUT SPECIFICATIONS

4.12.1 ATSC - 1:

Data Input:

• Data: 19.39 Mb/s

Impedance: As dictated by standards

Standard: SMPTE 310M, MPEG-TS and TSoIP
 Connector: As appropriate (BNC or RJ-45)

4.13 ENVIRONMENTAL

4.13.1 Ambient Temperature Range: 0 to +45 $^{\circ}$ C (+32 to +113 $^{\circ}$ F)

4.13.2 Humidity Range: 0 to 90% relative humidity

4.13.3 Maximum Altitude: 7,500 feet

4.14 POWER REQUIREMENTS

4.14.1 Input As required by the individual site (See Section 3.3)

4.14.2 Phase Symmetry ±2% maximum

4.14.3 AC Power Factor 0.9 or better

4.15 ELECTRICAL SPECIFICATIONS

Power output site dependent, see Section 4.3 "Specific Transmitter Location and Technical Information"

SECTION 5 EVALUATION AND SELECTION

5.1 Introduction

This section describes the evaluation process that will be used to determine which Proposal(s) provides the greatest value to the State. Agency will not necessarily award the Contract to the Respondent offering the lowest cost to the Agency. Instead, the Agency will award to the Respondent whose Responsive Proposal the Agency believes will provide the best value to the State.

5.2 Evaluation Committee

The Agency will use an evaluation committee to conduct a comprehensive, fair, and impartial evaluation of Technical Proposals received in response to this RFP. The evaluation committee will recommend an award based on the results of their evaluation to the Agency or to another person or entity that must approve the recommendation.

5.3 Technical Proposal Evaluation and Scoring

All Technical Proposals will be evaluated to determine if they comply with the Mandatory Specifications. The evaluation committee will fully evaluate and score all Responsive Proposals submitted by Responsible Respondents in accordance with this Section. In addition to other RFP requirements, to be deemed a Responsive Proposal, the Technical Proposal must:

- Answer "Yes" to all parts of Section 4 and include supportive materials as required to demonstrate the Respondent will be able to comply with the Mandatory Specifications in that section and
- Obtain the minimum score for the Technical Proposal. If a Technical Proposal does not meet the minimum score, it will be rejected and the Respondent's Cost Proposal will not be evaluated.

An addendum identifying the points assigned to the scoring criteria and identifying the minimum score for the Technical Proposal will be posted prior to the RFP closing.

5.4 Cost Proposal Scoring

After the Technical Proposals are evaluated and scored, the Cost Proposals will be opened and scored.

The cost proposal for each respondent will be evaluated in comparison with the other cost proposals received; however, the number of points possible will be proportional to each respondent's technical evaluation score.

The technical evaluation points received (numerator) is divided by the technical evaluation points possible (denominator) and multiplied by the maximum number of points in the cost evaluation. This provides the total points possible for the respondent in the cost evaluation.

Points Possible for Respondent = <u>Technical Evaluation Points Received</u> x Maximum Points in Cost Evaluation Technical Evaluation Points Possible The lowest cost proposal (numerator) is divided by the cost proposal being evaluated (denominator) and multiplied by the points possible for the respondent. This provides the cost evaluation points awarded.

Cost Evaluation Points Awarded = <u>Lowest Cost Proposal Received</u> x Points Possible for Respondent Cost Proposal Being Evaluated

For example, suppose there are 10 maximum points in the cost evaluation. A respondent that receives 100% of the points possible in the technical evaluation has the opportunity to earn 100% of the points possible in the cost evaluation (e.g., 10 points). If the cost proposal is the lowest cost, the full 10 points will be awarded.

However, a respondent that receives only 50% of the points possible in the technical evaluation has the opportunity to earn only 50% of the points possible in the cost evaluation (e.g., 5 points). If the cost proposal is the lowest cost, only 5 points are awarded, compared to the 10 points that could have been awarded if the respondent had received the highest technical evaluation score.

5.5 Tied Score and Preferences

- 5.5.1 An award shall be determined by a drawing when responses are received that are equal in all respects and tied in price. Whenever it is practical to do so, the drawing will be held in the presence of the Respondents who are tied in price. Otherwise the drawing will be made in front of at least three non-interested parties. All drawings shall be documented.
- **5.5.2** Notwithstanding the foregoing, if a tied score involves an lowa-based Respondent or products produced within the State of Iowa and a Respondent based or products produced outside the State of Iowa, the Iowa Respondent will receive preference. If a tied score involves one or more Iowa Respondents and one or more Respondents outside the state of Iowa, a drawing will be held among the Iowa Respondents only.
- 5.5.3 In the event of a tied score between Iowa Respondents, the Agency shall contact the Iowa Employer Support of the Guard and Reserve (ESGR) committee for confirmation and verification as to whether the Respondents have complied with ESGR standards. Preference, in the case of a tied score, shall be given to Iowa Respondents complying with ESGR standards.
- **5.5.4** Second preference in tied scores will be given to Respondents based in the United States or products produced in the United States over Respondents based or products produced outside the United States.
- **5.5.5** Preferences required by applicable statute or rule shall also be applied, where appropriate.

SECTION 6 CONTRACT TERMS AND CONDITIONS

6.1 Contract Terms and Conditions

The Contract that the Agency expects to award as a result of this RFP shall comprise the specifications, terms and conditions of the RFP, written clarifications or changes made by the Agency to the RFP through an amendment to the RFP in accordance with the provisions of the RFP, the Terms and Conditions, the offer of the successful Respondent contained in its Proposal, and any other terms deemed necessary by the Agency. No objection or amendment by a Respondent to the provisions or terms and conditions of the RFP or the Terms and Conditions shall be incorporated into the Contract unless Agency has explicitly accepted the Respondent's objection or amendment in writing.

The Contract terms and conditions in this Section 6, the General Terms and Conditions to the extent referenced and linked to on the RFP cover page, and/or any Terms and Conditions attached to and accompanying this RFP as an attachment hereto, will be incorporated into the Contract. The Terms and Conditions may be supplemented at the time of contract execution and are provided to enable Respondents to better evaluate the costs associated with the RFP specifications and the Contract. All costs associated with complying with such Terms and Conditions should be included in any pricing quoted by the Respondent.

By submitting a Proposal, Respondent acknowledges its acceptance of the terms and conditions of the RFP and the Terms and Conditions without change except as otherwise expressly stated in its Proposal. If the Respondent takes exception to a provision, it must identify it by page and section number, state the reason for the exception, and set forth in its Proposal the specific RFP or Terms and Conditions language it proposes to include in place of the provision. If Respondent's exceptions or proposed responses materially alter the RFP, or if the Respondent submits its own terms and conditions or otherwise fails to follow the process described herein, the Agency may reject the Proposal, in its sole discretion.

The Agency will evaluate all Proposals without regard to any proposed modifications to any terms and conditions of the RFP or Terms and Conditions by Contractor. Once a Proposal has been identified as the one for which an Award recommendation has been made, but prior to notifying Respondents of the decision, the Agency, in its sole discretion, may consider any proposed modifications to the terms and conditions of the RFP or Terms and Conditions identified in that Proposal. The Agency reserves the right to either award a Contract(s) without further negotiation with the successful Respondent or to negotiate Contract terms with the successful Respondent if the best interests of the State would be served. As such, if any proposed modifications are not determined to be in the best interests of the State, or appear to pose a substantial impediment to reaching agreement, the Agency may, in its sole discretion:

- **6.1.1** Issue a Notice of Intent to Award in favor of the successful Respondent, but decline to agree to or further negotiate any proposed modifications to terms and conditions identified by the Respondent in its Proposal;
- 6.1.2 Issue a Notice of Intent to Award in favor of the successful Respondent, and identify in the Notice proposed modifications to terms and conditions identified by the Respondent in its Proposal with which the agency will or will not agree or further negotiate;

- **6.1.3** Enter open-ended negotiations with the successful Respondent; provided, that any such negotiations shall be limited to the proposed modifications to terms and conditions identified by Respondent in its Proposal;
- **6.1.4** Change the Agency's recommendation for Award and issue a Notice of Intent to Award to a Respondent whose proposal does not pose as great of a challenge to the Agency.

Any ambiguity, vagueness, inconsistency or conflict, either internal to such modification(s) or arising when read in conjunction with other portions of the Contract, shall be construed strictly in favor of the State. Only those proposed modifications identified in the Notice of Intent to Award issued by the Agency as terms and conditions with which the agency will or will not agree or further negotiate shall be part of the Contract, and the State may ignore all proposed modifications, accept one or more and ignore others, accept all or, through negotiations after an award, agree to compromise language concerning one or more proposed modifications to be incorporated into a final Contract between the parties. By executing and submitting its Proposal in response to this RFP, Respondent understands and agrees that the State may exercise its discretion not to consider any or all proposed modifications Respondent may request and may accept Respondent's proposal under the terms and conditions of this RFP and the Terms and Conditions.

6.2 Contractual Terms and Conditions – No Material Changes/Non-Negotiable

Notwithstanding anything in this RFP to the contrary, Respondent may not take exception to or propose including language in any resulting contract that conflicts with or is otherwise inconsistent with the following:

6.2.1 Indemnification

Without specific authority to do so, the State, or agencies, cannot enter into agreements indemnifying Respondents, or any other entity, against third-party claims. A clause that intends to seek indemnification from the State, whether or not the clause contains the words "indemnity" or "indemnify," are not clauses to which the State may agree. The State will not agree to clause that includes the language "to the extent permitted by law" because, as explained, the State cannot indemnify Respondents to any extent.

6.2.2 Limitation of Liability

lowa Code section 8A.311(22) and 11 lowa Admin. Code Chapter 120 establish the rules to allow for the State to agree to a contractual limitation of Respondent liability clause in limited circumstances. Any request by Respondent for the State to limit damages not in accordance with lowa law or administrative rules is a request with which the State cannot agree.

6.2.3 Jurisdiction and Venue

lowa Code chapter 13 establishes that the lowa Attorney General is the State's attorney for all purposes, including management of litigation and claims against the state. The State may not preempt the Attorney General's authority by agreeing in advance to control the way litigation may be managed in the event of a dispute. Likewise, the State cannot agree to the jurisdiction or laws of another state or its courts, cannot agree to venue in another state, and cannot agree to participate in any form of alternative dispute resolution.

6.2.4 Confidentiality

All Iowa state agencies are subject to Iowa public records laws. The State cannot agree to contractual terms that attempt to prevent it from disclosing or disseminating records that constitute public records under Iowa Code chapter 22.

6.2.5 Unliquidated Expenses (i.e., Attorney Fees, Add-ons, or Cost Increases)

The State may not agree to clauses which may obligate it to pay for claims that might exceed its current funding appropriation. The State may only obligate those funds that have been appropriated to it by the Iowa Legislative Assembly and may only obligate those funds for the purposes for which the funds were appropriated.

6.3 Special Terms and Conditions

6.3.1 Term Length

The Contract shall have an initial term of One (1) year, beginning on the date of contract execution (the "Effective Date"). At the end of the Contract's initial term, the State shall have the option, in its sole discretion, to renew the Contract on the same terms and conditions for up to a total of five (5) additional one-year terms. The State will give the Respondent written notice of its intent whether to exercise each option no later than thirty days before the end of the Contract's then-current term.

6.3.2 Payment Terms

6.3.2.1 Payment Methods

The State of Iowa, in its sole discretion, will determine the method of payment for goods and/or services as part of the Contract. The State Pcard and EAP are preferred payment methods, but payments may be made by any of the following methods: Pcard/EAP, EFT/ACH, or State Warrant. Respondents shall indicate in their Cost Proposals all of the payment methods they will accept. This information will not be scored as part of the Cost Proposal or evaluated as part the Technical Proposal.

6.3.2.2 Electronic Funds Transfer (EFT) by Automated Clearing House (ACH)

The State of Iowa may make payment by EFT by ACH. Payments are deposited into the financial institution of the claimant's choice three working days from the issue date of the direct deposit.

https://das.iowa.gov/sites/default/files/acct_sae/man_for_ref/forms/eft_aut horization_form.pdf

6.3.2.3 State Warrant

The State of Iowa's warrant drawn on the Treasurer of State is used to pay claims against the departments of the State of Iowa. The warrant is issued upon receipt of proper documentation from the issuing department.

6.3.2.4 Credit card or ePayables

The State of Iowa's Purchasing Cards (Pcards) and ePayable solution (EAP) are commercial payment methods utilizing the VISA credit card network. The State of Iowa will not accept price changes or pay additional fees if Respondent uses the Pcard or EAP payment methods. Pcard-accepting Respondents must abide

by the State of Iowa's Terms of Pcard Acceptance. Respondents must provide a statement regarding their ability to meet the requirements I this subsection, as well as identifying their transaction reporting capabilities (Level I, II, or III).

6.3.2.5 Terms and Conditions for State of Iowa Purchasing Cards

The State of Iowa shall pay Contractor's invoices using its Purchasing Card Program (Pcard) whenever possible. The Pcard is a VISA credit card issued by U.S. Bank to allow authorized employees to make purchases on behalf of the State. It is a faster, more convenient alternative to traditional invoicing and remittance processing, allowing US Bank to pay the Contractor directly, generally within 48 hours of the transaction. Contractor shall comply with security measures for Pcard payments including:

- **6.3.2.5.1** Contractor shall comply with <u>Payment Card Industry Data Security Standard (PCI DSS)</u> to assure confidential card information is not compromised;
- **6.3.2.5.2** Contractor shall adhere to <u>Fair and Accurate Credit Transactions</u>
 <u>Act</u> requirements that limit the amount of consumer and account information shared for greater security protection;
- **6.3.2.5.3** Contractor shall not write down card numbers or store card information. When accepting orders by phone, Contractor shall process the transaction during the call and send itemized receipts (excluding card numbers) to the cardholder by fax, email, or mail (with delivery);
- **6.3.2.5.4** Contractor shall process payment for items when an order is placed only for items currently in stock and available for shipment, and only for services already rendered;
- **6.3.2.5.5** Contractor shall confirm that the name of purchaser matches the name on the card;
- **6.3.2.5.6** Contractor shall ensure Internet orders are processed via secure websites, featuring Verisign, TRUSTe, BBBOnline, or "https" in the web address;
- **6.3.2.5.7** Contractor shall shred any documentation with credit card numbers.

6.3.2.6 Payment Terms

Per Iowa Code 8A.514 the State of Iowa is allowed sixty (60) days to pay an invoice submitted by a Contractor.

6.3.2.7 Respondent Discounts

Respondents shall state in their Cost Proposals whether they offer any payment discounts.

6.3.2.8 Prompt Payment Discount

The State can agree to pay in less than sixty (60) days if an incentive for earlier payment is offered.

6.3.2.9 Invoices

Any invoices submitted must comply with applicable rules concerning payment of claims, including but not limited to those set forth at Iowa Administrative Code chapter 11—41.

6.3.3 Insurance

The Contract will require the successful Respondent to maintain insurance coverage(s) in accordance with the insurance provisions of the General Terms and Conditions and of the type and in the minimum amounts set forth below, unless otherwise required by the Agency.

Type of Insurance	LIMIT	AMOUNT
General Liability (including	General Aggregate	\$2 million
contractual liability) written	Products –	
on an occurrence basis	Comp/Op Aggregate	\$1 Million
	Personal injury	\$1 Million
	Each Occurrence	\$1 Million
Automobile Liability (including contractual liability) written on an occurrence basis	Combined single limit	\$1 Million
Excess Liability, Umbrella Form	Each Occurrence	\$1 Million
	Aggregate	\$1 Million
Errors and Omissions Insurance	Each Occurrence	\$1 Million
Property Damage	Each Occurrence	\$1 Million
	Aggregate	\$1 Million
Workers Compensation and Employer Liability	As Required by Iowa law	A required by Iowa law

Acceptance of the insurance certificates by the Department shall not act to relieve Contractor of any obligation under this Contract. It shall be the responsibility of Contractor to keep the respective insurance policies and coverages current and in force during the life of this Contract. Contractor shall be responsible for all premiums, deductibles and for any inadequacy, absence or limitation of coverage, and the Contractor shall have no claim or other recourse against the State or the Department for any costs or loss attributable to any of the foregoing, all of which shall be borne solely by the Contractor. Notwithstanding any other provision of this Contract, Contractor shall be fully responsible and liable for meeting and fulfilling all of its obligations under this section of the Contract.

6.3.4 Performance Security

The Contract may require the Respondent to provide security for performance [e.g. performance bond, escrow, letter of credit, liquidated damages]. Agency shall retain ten percent (10%) of each payment due under the Contract. Agency shall pay the retained amount only after all Deliverables have been completed by Contractor and accepted by the Agency.

6.4 Order of Precedence

If there is a conflict or inconsistency between any documents comprising the Terms and Conditions, such conflict or inconsistency shall be resolved according to the following priority, ranked in descending order: (1) any terms and conditions specifically set forth in this Section 6 (Contract Terms and Conditions & Administration) under a subsection with a heading entitled Special Terms & Conditions; (2) the General Terms and Conditions for Services Contracts or Goods Contracts to the extent referenced and linked to on the RFP cover page the Contract; (3) if neither the General Terms and Conditions for Service Contracts or Goods Contracts are linked to on the RFP cover page, any terms and conditions attached to and accompanying this RFP as attachment 5 (Terms and Conditions); and (4) any terms and conditions specifically set forth in this Section 6 (Contract Terms and Conditions & Administration) set forth under a subsection with a title other than Special Terms & Conditions.

Response Check List

RFP REFERENCE SECTION	RESPONSE INCLUDED	
	Yes	No
Technical Proposal		
Exhibit 1 - Transmittal Letter		
Exhibit 2 - Executive Summary		
Exhibit 3 - Firm Proposal Terms		
Exhibit 4 - Respondent Background Information		
Exhibit 5 - Experience		
Exhibit 6 - Termination, Litigation, and Debarment		
Exhibit 7 - Acceptance of Terms and Conditions		
Exhibit 8 - Mandatory Specifications		
Exhibit 9 - Equipment Description		
Exhibit 10 - Transmitters		
Exhibit 11 - Mask Filters		
Exhibit 12 - Heat-Load Calculation		
Exhibit 13 - System Efficiency		
Exhibit 14 - Power Amplification (PA)		
Exhibit 15 - Implementation Plan		
Exhibit 16 - Service and Maintenance		
Exhibit 17 - Warranty		
Public Copy of Technical Proposal with Confidential Information Excised (Optional)		
Cost Proposal		