

**TECHNICAL WORK MAY NOT BEGIN PRIOR TO CTR ACCEPTANCE**

NASA/GODDARD SPACE FLIGHT CENTER

**REQUEST FOR TASK PLAN / TASK ORDER**

<b>CONTRACTOR</b>	<b>CONTRACT NO./TASK NO.</b>	<b>JOB ORDER NUMBER</b>	<b>APPROP. FY</b>
<b>QSS Group, Inc.</b>	NAS5- <b>99124</b> TASK NO. <b>170</b> AMENDMENT	563-616-41-81-89	99 00

**TASK TITLE:** (NTE 80 characters; include Project name)  
**GOES N-Q Electrical Power System Engineering Services**

**APPROVALS:** (Type or print name and sign)

<b>ASSISTANT TECHNICAL REPRESENTATIVE (OR TASK MONITOR)</b>	<b>DATE</b>	<b>ORG CODE</b>	<b>MAIL CODE</b>	<b>PHONE</b>
Thomas Yi <i>Thomas Yi</i>	11/10/99	563	563	301-286-5070
<b>BRANCH HEAD</b>	<b>DATE</b>	<b>CODE</b>		<b>PHONE</b>
Marlon Enciso <i>Marlon Enciso</i>	11/10/99	563		301-286-5845
<b>CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE (COTR)</b>	<b>DATE</b>	<b>CODE</b>		<b>PHONE</b>
Robert Lebair <i>Robert A. Clark</i>	11/16/99	560		301-286-6588
<b>FLIGHT HARDWARE, CRITICAL GSE OR SOFTWARE?</b> <small>(IF YES, NEED CODE 303 CONCURRENCE NEXT BLOCK)</small>	<b>CONTRACTING OFFICER'S QUALITY REP.</b>	<b>DESIGNATED FAM:</b>		
<input checked="" type="checkbox"/> NO <input type="checkbox"/> YES	Larry Moore			

The contractor shall identify and explain the reason for any deviations, exceptions, or conditional assumptions taken with respect to this Task Order or to any of the technical requirements of the Task Order Statement of Work and related specifications. The contractor shall complete and submit the required Reqs and Certs.

*(To be completed by Contracting Officer)*

**C.O. Requested Quote on:**  
**Date:** NOV 18 1999

Contractor will develop specification or statement of work under this task for a future procurement.     NO     YES

Flight hardware will be shipped to GSFC for testing prior to final delivery.     NO     YES     N/A

Government Furnished Property/Facilities:     NO     YES - SEE LIST OF GFP (offsite only) / FACILITIES (onsite only)

Onsite Performance:     NO     YES    If yes:     TOTAL     PARTIAL  
If partial, indicate onsite work in SOW by asterisk (\*)

Surveillance Plan Attached:     NO     YES

Highlighted Contract Clauses:    *(to be completed by Contracting Officer)*

The effective date of this task order is December 17, 1999.

**INCENTIVE FEE STRUCTURE (check one)**

	<input checked="" type="checkbox"/> No. 1	<input type="checkbox"/> No. 2	<input type="checkbox"/> No. 3	<input type="checkbox"/> No. 4	<input type="checkbox"/> No. 5
Cost	10%	50%	25%	25%	%
Schedule	15%	25%	25%	50%	%
Technical	75%	25%	50%	25%	%

*(To be completed by Contracting Officer)*

The target cost of this task order is \$ 109,392.

The target fee of this task order is \$ 7,110.

The total target cost and target fee of this task order as contemplated by the Incentive Fee clause of this contract is \$ 116,502.

The maximum fee is \$ 10,392.

The minimum fee is \$0.

**AUTHORIZED SIGNATURE:**

THIS TASK ASSIGNMENT IS ISSUED ACCORDING TO THE CONTRACT CLAUSE "TASK ASSIGNMENTS AND REPORTS"

*Lorrie L. Eakin*  
 SIGNATURE OF CONTRACTING OFFICER

12/17/99  
 DATE

Lorrie L. Eakin  
 Contracting Officer

TYPED NAME OF CONTRACTING OFFICER

**CONTRACTOR'S ACCEPTANCE:**

\_\_\_\_\_  
 AUTHORIZED SIGNATURE

\_\_\_\_\_  
 DATE

**TECHNICAL WORK MAY NOT BEGIN PRIOR TO CO APPROVAL**

NASA/GODDARD SPACE FLIGHT CENTER

**REQUEST FOR TASK PLAN / TASK ORDER**

CONTRACTOR	CONTRACT NO./TASK NO.	TASK NO.	AMENDMENT
QSS Group, Inc.	NAS5- 99124	170	

Applicable paragraphs from contract Statement of Work: Function 2.D.7

**STATEMENT OF WORK:** (Continue on blank paper if additional space is required)

*(This is a follow-on to Task 13 under this contract. Task start date is 1/1/00.)*

The contractor shall provide the necessary engineering services to assist the Power Systems Branch in the technical oversight of the GOES N-Q Electrical Power System (EPS). This technical purview shall include spacecraft electrical power systems and associated flight interface and associated ground support equipment, and instrument power system development and verification. The contractor shall have knowledge of the GOES N-Q EPS, including batteries, and solar cells/arrays. The contractor shall have knowledge of ground integration procedures and electrical power system preparation procedures leading to spacecraft launch. The contractor shall be familiar with operations aspects of the GOES N-Q EPS.

The contractor shall:

1. Monitor power system design, integration, test activities, and pre-launch activities, including battery reconditioning for the GOES N-Q EPS.
2. Participate in all working meetings and teleconferences in the Branch, the Project, at the GOES N-Q Prime Contractor, at the Subcontractor facilities on issues related to the GOES EPS.
3. Review and provide recommendations on all EPS related problem reports, waivers, and deviations.
4. Report to the Branch and to the GOES Project on a weekly basis regarding the status of the GOES N-Q EPS.
5. Provide copies of written correspondence (memos and e-mail) between himself and the Project/Prime Contractor/ Subcontractor on GOES N-Q EPS to the ATR.

(CONTINUED)

**PERFORMANCE SPECIFICATIONS:**

All plans and procedures under this task are to be produced using industry standard practice.

**APPLICABLE DOCUMENTS:**

Evaluation and input to be based on all applicable GOES Spacecraft Performance and Verification Documents.

**TASK END DATE:** 9/30/00

**MILESTONES/DELIVERABLES AND DATES:**

Weekly Status Reports	Weekly to ATR and GOES Project
Summary Report on EPS Issues/Status	Initial status report within 2 days to ATR. Final Report within 7 days after Closure to ATR.
Monthly Reports	Monthly to ATR
GOES Spacecraft Review Summary Report	Within 14 days after Review Completion
Copies of Written Correspondance	Within 5 days of issuance

**PERFORMANCE STANDARDS:**

**Schedule:** On-time delivery of the above.  
**Technical:** ATR Acceptance of the above.

**FINAL DELIVERY DESTINATION (NAME, BLDG, ROOM):**

Thomas Yi, Bldg 20, Room 154

**TECHNICAL WORK MAY NOT BEGIN PRIOR TO CO APPROVAL**

NASA/GODDARD SPACE FLIGHT CENTER

**REQUEST FOR TASK PLAN / TASK ORDER**

CONTRACTOR	CONTRACT NO./TASK NO.	TASK NO.	AMENDMENT
QSS Group, Inc.	NAS5- 99124	170	

**STATEMENT of WORK** (Continued)

6. Communicate with the ATR within 2 days whenever a problem is surfaced that could affect the performance, schedule or cost of the EPS.

7. Attend all GOES N-Q spacecraft reviews such as Program Status Review, Pre-Ship Review, Launch Readiness Reviews, etc.

8. Meet or communicate regularly (biweekly, at minimum) with GOES Prime Contractor personnel to ascertain current status of the EPS and assist in resolving any open issues.

9. Provide a monthly summary of his activities to the ATR.

10. Review and analyze flight battery/cell performance and cell life cycle test results.

11. Analyze flight solar array power output predictions and review performance test results.

12. Evaluate power system electronics performance under steady state and dynamic load conditions such as determination of potential for lockup and instability.

13. Monitor the design and improvement to the SXI, Sounder and Imager power supply electronics design.

14. Monitor the growth in power demand by instruments and subsystems to determine the impact on achieving power system energy balance at mission end-of-life.

15. Investigate in-flight power system anomalies and failures on spacecraft that share design commonality with the GOES N-Q EPS to prevent such occurrences during the GOES N-Q mission.