

Requirements for Design Presentation Meetings and Proposal Submissions for
PROJECT MANAGEMENT

Assignment of points

B1	Project Management	100
B2	Civil Design	75
B3	Systems Design	75
B4	Construction	100
B5	Maintenance and rehabilitation	75
B6	Operations	75
	Total Points	500

Key to Project Management Design Presentation Meeting and Proposal Submissions

G.U.	General Understanding	Demonstrate a general understanding of the requirement
D.U.	Detailed Understanding	Demonstrate that Project Co has a detailed understanding of the requirement and how Project will apply or use the requirement to develop a specific approach
G.A.	General Approach	Presents a general or an example of an approach or solution to a requirement
D.A.	Detailed Approach	Presents a detailed approach to a requirement with specific solutions, products, concept drawings or specification
G.D.	General Demonstration	Presents drawings, specifications, and site specific information that demonstrates Project Co's specific solution to a requirement
S.D.	Specific Demonstration	Presents drawings, specifications, and site specific information to respond to a Specific Issue that demonstrates Project Co's specific solution to that issue
N.A.	Not Applicable	Requirement to be addressed later or in another proposal section
S.I.	Supplemental Information	Project Co to provide any supplemental information or updates to previous information, if required.
NOTE	Note on Submission	A specific note or instruction about a particular item

Requirements for Design Presentation Meetings and Proposal Submissions for
PROJECT MANAGEMENT

B.1	Project Management		Primary Reference
B1.0	Holistic Approach To Project Management		
	1	Project Co's Holistic Approach To Project Management	Schedule 15-2 Article 1
	2	Project Management Plan	Schedule 15-2 Article 1.2(a):(n)
B1.1	Project Management Organization and Key Personnel		Primary Reference
	1	Project Management Organization for Phase 1 and Phase 2	Schedule 15-2 Article 1.2(0)(i)
	2	Key Project Management Personnel	Schedule 15-2 Article 1.2(0)(ii) and 13.2 (m)(iii)
B1.2	Project Management		Primary Reference
	1	Management Information System	Schedule 15-2 Article 1.2(0)(iii)
	2	Performance Measurement and Performance Charts	Schedule 15-2 Article 1.2(0)(iv)
	3	Progress Reviews	Schedule 15-2 Article 1.2(0)(vi) & (vii) and Article 1.5
	4	Submittal Report, Submittal List and Submission Check Lists	Schedule 15-2 Article 1.2(0)(viii)
	5	Engineering and Design Plan	Schedule 15-2 Article 1.2(0)(ix)
	6	Manufacturing and Procurement Plan	Schedule 15-2 Article 1.2(0)(x)
	7	Installation Plan	Schedule 15-2 Article 1.2(0)(xi)
	8	Construction Management Plan	Schedule 15-2 Article 1.2(0)(xii)
	9	Configuration Management	Schedule 15-2 Article 1.2(0)(xiii) and Article 1.3
	10	Systems Integration and Interface Management Plan	Schedule 15-2 Article 1.2(0)(xiv) and Article 1.4
	11	Dependability Plan	Schedule 15-2 Article 1.6

Requirements for Design Presentation Meetings and Proposal Submissions for
PROJECT MANAGEMENT

B1.3	Verification Testing Acceptance and Commissioning		Primary Reference
	1	General VTAC requirements	Schedule 15-2 Article 13.1, 13.2, 13.3, 13.6
	2	Verification Tests	Schedule 15-2 Article 13.4
	3	Acceptance	Schedule 15-2 Article 13.5
	4	Certification	Schedule 15-2 Article 13.7
	5	Demonstrated Systems Operations	15-2 Article 13.6(a)
	6	System Operations and Maintenance Personnel	Schedule 15-2 Article 13.9, 13.10, 13.11, 13.12, and 13.13

	Safety and Security Program		Primary Reference
B1.4	1	Safety and Security Management Plan	Schedule 15-3 Article 2.1 and 2.2 (a):(h)
	2	Safety and Security Certification	Schedule 15-3 Article 2.2 (i)
	3	Safety during Construction and testing	Schedule 15-3 Article 2.2 (j)
	4	System Safety Program Plan - Operations	Schedule 15-3 Article 2.2 (k) and 2.3(a):(g)
	5	System Security Plan - Operations	Schedule 15-3 Article 2.3 (h)

	Quality Management		Primary Reference
B1.5	1	Quality Management	Schedule 11

	Review Procedure		Primary Reference
B1.6	1	Review Procedure	Schedule 10

Requirements for Design Presentation Meetings and Proposal Submissions for
PROJECT MANAGEMENT

Holistic Approach to Project Management to be addressed in Part B4.0						The Proponent's holistic approach to Project Management, at an appropriate level of detail, as set out in or otherwise referenced in Schedule 15-2 Article 1 and the Project Agreement, and shall include the following:
Sub-item	Sub-item description	Primary reference	DPM #1	DPM #2	DPM #3	Holistic Submission Requirements for Project Management
1	Project Co's Holistic Approach To Project Management	15-2 Art 1	D.U.	G.A	S.I.	Provide Project Co's detailed understanding of the requirements for Project Management during the Phase 1 and Phase 2 time frames and its general approach to the Work, experience with the Work, and approach to working as an integrated team.
2	Project Management Plan	Schedule 15-2 Article 1.2(a):(n)	D.U.	G.A NOTE	S.I.	Provide Project Co's detailed understanding and general approach to complying with the requirements for the preparing and implementing Project Co's Project Management Plan. - (NOTE) Project Co's detailed approach to Art 1.2 (v), (ix), (x), (xi), (xii) are addressed in B2, B3, and B4 and can be referenced for the B.1 submission and does not have to be repeated.

Requirements for Design Presentation Meetings and Proposal Submissions for
PROJECT MANAGEMENT

Project Management Organization and Key Personnel to be addressed in Part B1.1						The Proponent shall describe the Project Management organization and key personnel for Phase 1 and Phase 2, at an appropriate level of detail, and shall include the following:
Sub-item	Sub-item description	Primary reference	DPM #1	DPM #2	DPM #3	Submission Requirements for the Project Management Organization and key personnel
1	Project Management Organization for Phase 1 and Phase 2	Schedule 15-2 Article 1.2(0)(i)	G.A.	D.A. G.D.	S.I.	<p>Provide Project Co's approach to its Project Management organization, after Financial Close has been achieved, and identify all Phase 1 and Phase 2 Key Project Management Individuals and other key personnel responsible for project management operations.</p> <ul style="list-style-type: none"> - Provide a description of the role and responsibilities, qualifications, and authority of Project Co's Key Project Management individuals and other project management personnel. - Provide a description of the organizational interfaces between those responsible for project management and those responsible for design management and construction management. - (G.D.) Provide a detailed organizational chart, for Phase 1 and Phase 2, indicating the key personnel, their role, firm association, and reporting lines within the Project Management organization and beyond the project management organization.
2	Key Project Management Personnel	Schedule 15-2 Article 1.2(0)(ii), Article 13.2 (m)(iii) and RFQ	G.A.	G.D	S.I.	<p>(G.D.) For the DPM process provide a brief bio for each of Project Co's Key Project Management Personnel, as cited in Schedule 9 of the RFP, and other significant project management positions including the following positions or equivalent positions with similar responsibilities. If a specific person has not been determined for a particular position, provide the minimum qualifications that Project Co will set for that position. Resumes or minimum qualifications shall be provided in the final submission:</p> <ul style="list-style-type: none"> - Project Manager (Phase 1 and Phase 2) (Key Person) - Manager of Project Control (Phase 1 and Phase 2) (Key Person) - Lead Scheduler - Lead Cost Manager - Document Control Manager - Design Review Manager - Manager of Quality Assurance and Quality Control (Key Person) - Manager of Materials Testing - Manager of Systems Integration - Manager of System Testing and Commissioning - Manager for Safety Certification <p>For each key person or significant position, indicate if they are full time or part time positions, when they will be assuming their role on the project and when they will be redeployed.</p>

Requirements for Design Presentation Meetings and Proposal Submissions for
PROJECT MANAGEMENT

Project Management items to be addressed in Part B1.2						The Proponent shall address the Project Management requirements, at an appropriate level of detail, as set out in or otherwise referenced in Schedule 15-2 Article 1 and the Project Agreement, and shall include the following:
Sub-item	Sub-item description	Primary reference	DPM #1	DPM #2	DPM #3	Submission Requirements for Project Management
1	Management Information System	Schedule 15-2 Article 1.2(0)(iii)	D.U.	G.A.	D.A.	Provide Project Co's understanding of the requirements for the Management Information System (MIS) and describe Project Co's approach for preparing and implementing the MIS.
2	Performance Measurement and Performance Charts	Schedule 15-2 Article 1.2(0)(iv)	D.U.	D.A.	S.I.	Provide Project Co's understanding of the requirements and approach to preparing and implementing the performance measurement and performance charts.
3	Progress Reviews	Schedule 15-2 Article 1.2(0)(vi) & (vii) and Article 1.5	G.U.	G.A.	S.I.	Provide Project Co's understanding of the requirements for progress reviews and approach to support the project review process.
4	Submittal Report, Submittal List and Submission Check Lists	Schedule 15-2 Article 1.2(0)(viii), Appendix U	D.U.	D.A. G.D.	S.I.	Provide Project Co's approach to developing the list of Project Management submittals for the submittal report and the submittal checklist to be used for project management submittals. - (G.D.) Provide a preliminary submittal list for Project Management Submittals. - (G.D.) Preliminary Project Management submittal checklists.
5	Engineering and Design Plan	Schedule 15-2 Article 1.2(0)(ix)	D.U.	D.A. G.D. NOTE	S.I.	Provide Project Co's approach to creating the Packaging Plans for civil design and system design submittals into a projectwide Packaging Plan - Identify how each work package will be implemented (E.g. self performed, fast tracked, bid, sole source procurement etc.). - (G.D.) Preliminary submittal list of construction and procurement work packages in the Packaging Plan for Phase 2 work. - (NOTE) information provided in B2 and B3 can be referenced and does not have to be repeated for this item.
6	Manufacturing and Procurement Plan	Schedule 15-2 Article 1.2(0)(x)	D.U.	D.A. NOTE	S.I.	Provide Project Co's understanding and approach to preparing and implementing a Manufacturing and Procurement Plan with a focus on Project Management responsibilities (NOTE) Information provided in B4 can be referenced and does not have to be repeated for this item.
7	Installation Plan	Schedule 15-2 Article 1.2(0)(xi)	D.U.	D.A. NOTE	S.I.	Provide Project Co's understanding and approach to preparing and implementing an Installation Plan with a focus on Project Management responsibilities. (NOTE) Information provided in B4 can be referenced and does not have to be repeated for this item.
8	Construction Management Plan	Schedule 15-2 Article 1.2(0)(xii)	D.U.	D.A. NOTE	S.I.	Provide Project Co's understanding and approach to preparing and implementing a Construction Management Plan with a focus on Project Management responsibilities. (NOTE) Information provided in B4 can be referenced and does not have to be repeated for this item.

Requirements for Design Presentation Meetings and Proposal Submissions for
PROJECT MANAGEMENT

Project Management items to be addressed in Part B1.2						The Proponent shall address the Project Management requirements, at an appropriate level of detail, as set out in or otherwise referenced in Schedule 15-2 Article 1 and the Project Agreement, and shall include the following:
Sub-item	Sub-item description	Primary reference	DPM #1	DPM #2	DPM #3	Submission Requirements for Project Management
9	Configuration Management	Schedule 15-2 Article 1.2(0)(xiii) and Article 1.3	D.U.	G.A.	D.A.	Provide Project Co's understanding and approach to preparing and implementing a Configuration Management and Document Control Plan. - Provide Project Co's understanding of the elements that are to be addressed in the Configuration Management Plan and provide Project Co's general approach to addressing each element. - Provide Project Co's detailed approach to Document Control.
10	Systems Integration and Interface Management Plan	Schedule 15-2 Article 1.2(0)(xiv) and Article 1.4	D.U.	D.A.	S.I.	Provide Project Co's understanding and approach to preparing and implementing a Systems Integration and Interface Management Plan. - Provide Project Co's understanding of the elements that are to be addressed in the interface Management section of the Systems Integration and Interface Management Plan and provide Project Co's general approach to addressing each element. - Provide Project Co's understanding of the elements that are to be addressed in the System Integration section of the Systems Integration and Interface Management Plan and provide Project Co's general approach to addressing each element.
11	Dependability Plan	Schedule 15-2 Article 1.6	D.U.	G.A.	D.A.	Provide Project Co's understanding and approach to preparing and implementing a Dependability Plan. - Provide Project Co's understanding of the elements that are to be addressed in the Dependability Plan and provide Project Co's general approach to addressing each element.

Requirements for Design Presentation Meetings and Proposal Submissions for
PROJECT MANAGEMENT

Verification, Testing, Acceptance and Commissioning items to be addressed in B1.3						The Proponent shall address the Verification, Testing, Acceptance and Commissioning requirements, at an appropriate level of detail, as set out in or otherwise referenced in Schedule 15-2 Article 13 and the Project Agreement, and shall include the following:
Sub-item	Sub-item description	Primary reference	DPM #1	DPM #2	DPM #3	Submission Requirements for Verification, Testing, Acceptance and Commissioning
1	General VTAC requirements	15-2 Article 13.1, 13.2, 13.3, 13.6(b)(c)	D.U.	G.A.	D.A.	<p>Provide Project Co's understanding and approach to Verification, Testing, Acceptance and Commissioning</p> <ul style="list-style-type: none"> - Provide Project Co's approach to preparing and implementing the VTAC Plan - (G.D.) Provide and outline of the VTAC Plan - Provide Project Co's understanding and approach to complying with the requirements of Production Improvement Verification Program and what components being proposed by Project Co are anticipated to be subjected to the PIVP. - Provide Project Co's understanding and approach to complying with the requirements of the Software Verification Program. - Provide Project Co's understanding and approach to complying with the requirements of the Maintainability Demonstration Test Program and the Dependability Demonstration Test Program. - Provide Project Co's understanding and approach to complying with the requirements of the System Assurance Monitoring Plan.
2	Verification Tests	15-2 Article 13.4	G.U.	G.A.	G.D. NOTE	<p>Provide Project Co's approach to ensuring that the Verification, Testing and Acceptance Program includes all tests needed to ensure that the Stage 1 LRT System is ready for service.</p> <ul style="list-style-type: none"> - (G.D.) Provide a comprehensive List of test and inspection procedures that include will be performed as part of the Verification, Testing, and Acceptance process. - (NOTE) list of test and inspection procedures provided in B2 and B3 do not have to be repeated for this item and can be incorporated by reference
3	Acceptance	15-2 Article 13.5	G.U.	D.U.	S.I.	Provide Project Co's understanding of the acceptance requirements.
4	Certification	15-2 Article 13.7	G.U.	D.U.	S.I.	Provide Project Co's understanding of the requirements for achieving substantial completion and final completion.
5	Demonstrated Systems Operations	15-2 Article 13.6(a)	G.U.	D.U.	S.I.	Provide Project Co's understanding and approach of the requirements for the Demonstrated System Operations
6	System Operations and Maintenance Personnel	15-2 Article 13.9, 13.10, 13.11, 13.12, and 13.13	G.U.	G.A. G.D.	S.I.	<p>Provide Project Co's understanding and approach to staffing and training during the prerevenue service period.</p> <ul style="list-style-type: none"> - (G.D.) Provide the outline of the O&M staffing and training plan. - Provide an organization chart of the O&M staff and identify number of staff needed for each position in the O&M organization - Provide a staffing diagram indicating the ramping up and training of staff during the prerevenue period.

Requirements for Design Presentation Meetings and Proposal Submissions for
PROJECT MANAGEMENT

Safety and Security Program items to be addressed in Part B1.4						The Proponent shall address the Safety and Security Program requirements, at an appropriate level of detail, as set out in or otherwise referenced in Schedule 15-3 Article 2 and the Project Agreement, and shall include the following:
Sub-item	Sub-item description	Primary reference	DPM #1	DPM #2	DPM #3	Submission Requirements for Safety and Security Program
1	Safety and Security Management Plan	15-3 Article 2.1 and 2.2 (a):(h)	D.U.	G.A.	D.A.	Provide Project Co's understanding and approach to preparing and implementing the Safety and Security Management Plan.
2	Safety and Security Certification	15-3 Article 2.2 (i)	D.U.	G.A.	D.A.	Provide Project Co's understanding and approach to preparing and implementing the Safety and Security Certification Program.
3	Safety during Construction and testing	15-3 Article 2.2 (j)	D.U.	G.A.	D.A.	Provide Project Co's understanding and approach to providing safety during construction and testing activities. -(NOTE) The information provided in B4 does not have to be repeated for this item and can be incorporated by reference.
4	System Safety Program Plan - Operations	15-3 Article 2.2 (k) and 2.3(a):(g)	D.U.	G.A.	D.A.	Provide Project Co's understanding and approach to addressing the requirements for System Safety Program Plan for operations.
5	System Security Plan - Operations	15-3 Article 2.3 (h)	D.U.	G.A.	D.A.	Provide Project Co's understanding and approach to preparing and implementing the System Security Plan. - Provide Project Co's detail approach to Access Management and Control. - Provide Project Co's approach to assessing the need for a wayside intrusion detection installation.

Requirements for Design Presentation Meetings and Proposal Submissions for
PROJECT MANAGEMENT

Quality Management items to be addressed as part of B1.5						The Proponent shall describe its understanding and approach to the performance of the Work as it relates to quality management, as set out in or otherwise referenced in Schedule 11 and the Project Agreement, and shall include the following:
Sub-item	Sub-item description	Primary reference	DPM #1	DPM #2	DPM #3	Submission Requirements for Quality Management
1	Quality Management	Schedule 11	D.U.	G.A.	D.A.	Provide Project Co's understanding and approach to complying with the requirements for quality management.

Requirements for Design Presentation Meetings and Proposal Submissions for
PROJECT MANAGEMENT

Review Procedure items to be addressed as part of B1.6						The Proponent shall describe its understanding and approach to the Review Procedure requirements, as set out in or otherwise referenced in Schedule 10 and the Project Agreement, and shall include the following:
Sub-item	Sub-item description	Primary reference	DPM #1	DPM #2	DPM #3	Submission Requirements for Review Procedures
1	Review Procedure	Schedule 10 Appendix U	D.U.	G.A.	D.A.	Provide Project Co's understanding and approach to complying with the review procedure and design management requirements. - Provide proposed design and design quality initiatives.