
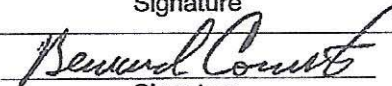

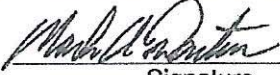

		AREVA Federal Services LLC				
		<b>FABRICATION AND CONSTRUCTION READINESS REVIEW CHECKLIST</b>				
Client: DOE		FCRR Mtg. Date: 10/18/17		Document No.: FRRC-3020033-000 <sup>001</sup> <i>SWK 11/7/2017</i>		
Project Title: DOE Atlas Railcar		Project No: 00225.03.0050				
Component/Item: Atlas railcar and buffer railcar						
Supplier: Kasgro Rail						
Prepared By: S. Klein						
Requirements	Complete			Assigned Lead	Comments	Requirement Complete Initial/Date
	Yes	No	N/A			
1	Verify the reconciliation of the SAR to fabrication/construction documents has been completed in accordance with AFS-EN-PRC-018.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	S. Klein	The railcar design is not licensed by the NRC <i>SWK 10/18/17</i>
2	Supplier approved by QA as required ("A" suppliers on ASL, etc.) for scope of work.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	B. Counterman	Kasgro is on AFS ASL <i>10/18/17</i>
3	Purchase Order w/attachments approved by appropriate personnel and issued to the supplier. Supplier acknowledgement received.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	M. Denton	Purchase Request CO9 to PO#15C3011916 completed; PO in process of release/transmittal; complete PO processing by AFS by 10/26. <i>complete, CO9 acknowledged by Kasgro 10/31/17</i> <i>MAD 11/7/17</i>
4	Drawings and specifications transmitted to and acknowledged by the supplier as required by project management, procurement and applicable procedures.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	M. Denton	No AFS drawings or specification created/transmitted. <i>MAD 10/19/17</i>
5	Production/fabrication/construction schedule provided by supplier, reviewed and accepted by PM.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	M. Denton	AFS generated revised Phase 3 schedule (based on Kasgro input); revised schedule has been reviewed and approved as internal Baseline Change Request. <i>MAD 10/19/17</i>
6	Purchase Orders for supporting suppliers (items and services provided by AFS) have been issued.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	S. Klein	None provided by AFS for this scope. <i>SWK 10/18/17</i>
7	Client contract requirements incorporated in project planning. Appropriate requirements passed on to suppliers.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	M. Denton	Reference PO#15C3011916-000, Attachment 4 <i>MAD 10/18/17</i>
8	Customer and AFS Hold and Witness Points established and communicated to the supplier through the AFS Purchase Order (see guideline AFS-EN-GDE-004).	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	B. Counterman	Major milestones are established by PO; reference PO# 15C3011916-000, Attachment 9. Additional Hold and Witness points will be established during review of the supplier's travelers. Traveler hold/witness hold points to be inserted into the project schedule. Travelers to AFS by 10/25. AFS to determine scheduled activities by 10/20. <i>complete per DTF-007</i> <i>bc 11/7/17</i>
9	Information containing all required documentation has been provided to Records Management, Quality Assurance and the supplier (purchase order, drawing, specification, procedures, etc.).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	M. Denton	All documents have been released through AFS records management; see PO attachments for AFS records mgmt. stamp. <i>MAD 10/19/17</i>

Requirements		Complete			Assigned Lead	Comments	Requirement Complete
		Yes	No	N/A			Initial/Date
Client: DOE		FCRR Mtg. Date: 10/18/17			Document No.: FRR-3020033-000-001 <i>swk 11/7/17</i>		
10	Lessons Learned from prior similar projects discussed and documented by the project team.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	M. Denton	Kasgro presented M290 lessons at FCRR and AFS presented past fab lessons in Phase 3 kickoff; reference Kickoff presentation pages 18-19.	<i>MMD 10/18/17</i>
11	Prefabrication/preconstruction meeting/conference call with the supplier scheduled/completed to review applicable criteria prior to fabrication/construction.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	M. Denton	FCRR and Phase 3 Kickoff scheduled and occurred 10/18/17.	<i>MMD 10/18/17</i>
12	Fabrication/construction plan submitted by supplier and approved.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	M. Denton	Travelers include: Form 44B Rev TBD, Form 42 Rev TBD, Form 84 Rev 4-11-17, Form 85 Rev 4-11-17, Form 86 Rev TDB, Form 44C Rev 000. To be received by 10/25/17 and reviewed by AFS by 11/01/17.	<i>MMD 11/7/17</i>
13	All at-risk or conditionally approved releases have been reconciled (Example: AFS has NRC CoC in hand, etc.).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	S. Klein	No at-risk or conditional release requirements have been placed on Kasgro by AFS or the AAR. Also, the Atlas railcar is not licensed by the NRC. The railcar will be conditionally approved for testing by the AAR EEC; however Kasgro fabrication is not specifically constrained by the AAR's release.	<i>SWK 10/18/17</i>
14	Flow down requirements have been provided and accepted by applicable sub-tier suppliers for start of work.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	M. Denton	Kasgro has received and accepted flow-down requirements (ref Item #7). However, Kasgro is responsible for implementing flow down requirements to sub-tier suppliers, AFS cannot legally advise. Kasgro has independently prepared flow-downs based on received T&Cs.	<i>MMD 10/18/17</i>
15	Component or Item Classification Evaluation current and consistent as appropriate to the project.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	S. Klein	There are no AFS drawing for fabrication and no CCEs were generated. Fabrication will be per Kasgro design and drawings as received during Phase 2 and amended as necessary in Phase 3. (10 CFR Part 71)	<i>SWK 10/18/17</i>
16	Critical characteristics for inspection have been considered and identified.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	S. Klein	AFS to review inspection plans and to provide hold and witness points for traveler insertion. Inspection plans include: Form 36-A, Form 6-A, Assembly Checklist TEC-300, Assembly Checklist TEC-301, Form 9B & 9C, Form 9Z-A-1, Form 5-12-B. To be received by 10/25/17 and reviewed by AFS by 11/01/17.	<i>SWK 11/7/17</i>

Requirements		Complete			Assigned Lead	Comments	Requirement Complete Initial/Date
		Yes	No	N/A			
Client: DOE		FCRR Mtg. Date: 10/18/17			Document No.: FRR-3020033-000 <sup>swk</sup> 001 <sup>11/7/17</sup>		
17	Supplier documents (drawings, procedures, material certifications, etc.) and prerequisites (qualifications, prefabrication/preconstruction tests, etc.) are reviewed and approved by AFS using the Supplier Data Submittal process, and supplier notified.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	S. Klein	SDRL revision 2 sent with CO9 (Ref Item # 3 for PO change order). Documents to be reviewed using DTF process.	swk 11/7/17
18	Supplier process/fabrication/work control documents (shop drawings, procedures, travelers, etc.) include, as a minimum, the requirements of AFS project-specific drawings and specifications.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	S. Klein	No AFS drawing or specification requirements. However, DBRD requirements verified in Phase 2 design by AFS Engineering Oversight process.	swk 10/13/17
19	Project risk register updated.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	M. Denton	Risk register updated and evaluated monthly; last update as of 09/27/2017	MAD 10/18/17
20	Define engineering of welds, welding and inspections to the fabricator/constructor. (Example: If welds are load bearing, pressure, vacuum, seal, etc. then define in a letter to the fabricator/constructor such that they will have some understanding of the importance.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	S. Klein	AFS is not the design authority for the Atlas railcar. The railcar and buffer cars are designed by Kasgro to AAR Specification S-2043 which includes weld design and inspection requirements.	swk 10/13/17
21	Data Package contents, format, schedule, and review process defined to fabricator/constructor.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	M. Denton	Included as SDRL #2 in transmittal of PO#15C3011916, CO9 (ref Item #3).	MAD 11/7/17
22	ES&H requirements have been provided to the supplier	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	M. Denton	See Kasgro PO#15C3011916-000, Page 4 for ES&H requirement.	MAD 10/18/17
23	Added: Kasgro NCR program reviewed, AFS to provide oversight of NCRs; Kasgro to provide copies of NCRs for records (use as-is or repair)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	M. Denton	Included in SDRL #2 as included in transmittal of PO#15C3011916, CO9 (ref Item #3).	MAD 11/7/17
24	Added: Kasgro Government Property Control Program (and procedure) reviewed; Definition of government property added to procedure.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	M. Denton	Revised to better define government property; see Kasgro PO#15C3011916-009, Attachment 41 (ref. Item #3).	MAD 11/7/17
25		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
26		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
27		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Responsible Engineer: S. Klein		 Signature			10/18/2017 Date		
QA Engineer: B. COUNTERMAN		 Signature			10/18/17 Date		

	AREVA Federal Services LLC	
	FABRICATION AND CONSTRUCTION READINESS REVIEW CHECKLIST	
Client: DOE	FCRR Mtg. Date: 10/18/17	Document No.: FRRC-3020033-000 001 <i>swk 11/7/17</i>
<input type="checkbox"/> FCRR complete, fabrication/construction may proceed, or <input checked="" type="checkbox"/> Limited fabrication/construction may proceed as identified below, or <input type="checkbox"/> Recommend proceeding with fabrication/construction with open items and required action(s) listed below.		
Project Manager	 Signature	<i>10/18/17</i> Date

	AREVA Federal Services LLC	
	<b>FABRICATION AND CONSTRUCTION READINESS REVIEW CHECKLIST</b>	
Client: DOE	FCRR Mtg. Date: 10/18/17	Document No.: FRR-3020033-000-001 <i>SWK 11/7/2017</i>
<b>FABRICATION/CONSTRUCTION LIMITATIONS/ACTIONS</b>		
Kasgro is allowed to proceed with material procurement and submittal of required documents for SDRL.		
<b>Open Item(s)</b>	<b>Required Action</b>	
AFS PO #15C3011916 C09 FRR #3, #17, #21, #23, #24	Submit C09 to Kasgro. Receive Supplier acknowledgment	
Review of supplier travelers FRR #8, #12	Review supplier travelers	
Review of supplier inspection plans FRR #16	Review supplier inspection plans	
	Explanation for starting fabrication: Need to start procurement activities to meet project schedule.	
	Open items do not affect material procurement.	
<b>USE ATTACHMENT(S) IF MORE SPACE IS REQUIRED</b>		
Approval for Limited Fabrication/Construction with Open Items:	Sr. Manager, Operations	<b>HEAVNER Wendell</b> <small>Digitally signed by HEAVNER Wendell  DN: o=AREVA GROUP, 2.5.4.45=1408A921038773620977A5,  cn=HEAVNER Wendell  Date: 2017.10.23 16:04:50 -04'00'</small>
	Signature	Date
All Open Items Are Closed:	Responsible Engineer <i>S. Klein</i>	<u>11/7/2017</u>
	Signature	Date
FCRR is Closed	QA Engineer <i>B. COUNTERMAN</i>	<u>11/7/17</u>
	Signature	Date
FCRR is Closed	<i>MARCO DENTON</i> Project Manager	<u>11/7/2017</u>
	Signature	Date