

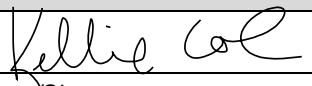



UPF PAGE/PROCEDURE CHANGE NOTICE (PRCN)

PRCN Number:	PRCN-Y17-95-64-874-R03-01	Effective Date:	03/10/23	
NOTE: PRCN Effective Date cannot precede effective date of associated document.				
<input type="checkbox"/> Intent Change		<input checked="" type="checkbox"/> Non-Intent Change		
Associated Document Number:	Y17-95-64-874	Rev:	3	
Associated Document Title: UPF Rigger, Signal Person and Competent Person Rigger Qualification				
Justification for Change: This PRCN is in response to CR-03941				
Identify the scope of the change, including mark-up (i.e., strike-through for deletions, colored text for additions) of any new, removed, or changed content. Update to 4.0 Records: From: 4.0 RECORDS Records generated by this procedure shall be maintained in accordance with Y15-95-800, UPF Document Management. Record types for documents submitted to the UPF Document Management Center (DMC) are identified in ML-PS-801768-A001, Uranium Processing Facility Project Master Document Type List. Quality type is listed as Quality Lifetime (QA-L), Quality Nonpermanent (QA-NP), or Non Quality (Non-QA). Records generated during the performance of this procedure include:				
Record or Form Number	Record Title	Record Holder	System/ Location	Quality Type
CFN-1242	<i>Qualified Rigger/Signalperson Qualification Record</i>	UPF Training	SAP	QA-NP
CFN-1246	<i>Competent Person Rigger Qualification Record</i>	UPF Training	SAP	QA-NP
To: 4.0 RECORDS Records generated by this Document shall be maintained in accordance with Y15-95-800, <i>UPF Document Management</i> . The following records generated are:				
Record or Form Number	Record Title	System/ Location	Document Type	
CFN-1242	<i>Qualified Rigger/Signalperson Qualification Record</i>	InfoWorks	TQR	
CFN-1246	<i>Competent Person Rigger Qualification Record</i>	InfoWorks	TQR	
Remove: 5.2 Interfacing References ML-PS-801768-A001, Uranium Processing Facility Project Master Document Type List				




UPF PAGE/PROCEDURE CHANGE NOTICE (PRCN)

Preparer			
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		<i>Printed Name/Signature</i>	<i>Date</i>
Approval			
UPF Project Field Engineer	Bradley A. Lewis		03/10/23
		<i>Printed Name/Signature</i>	<i>Date</i>

UPF Rigger, Signal Person, and Competent Person Rigger Qualification

Preparer:




Tammy D. Threat
UPF Construction Issues Management Procedure
Compliance

05/18/20

Date

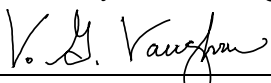
Approval:



Bryan C. Leber
UPF Project Field Engineer

06/02/20

Date



Greg G. Vaughn
UPF Training Manager

06/22/20

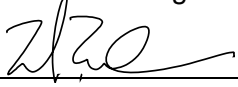
Date



W. Dave Ross
UPF Site Manager

06/28/20

Date



Michael S. Robinson
UPF Project Manager

06/04/20

Date

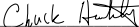
10/19/2020

Effective Date

Implements Quality Requirements☐ None☒ BNI☐ CNS☐ BNI and CNS**RC-UPF DMC**

07/23/20 12:03

This document has been reviewed by a Y-12 DC /
UCNI-RO and has been determined to be
UNCLASSIFIED and contains no UCNI. This review
does not constitute clearance for Public Release.

Name:  Date: 06/29/20

REVISION LOG**Revision 3** ☐ Major intent ☒ Minor intent ☐ Non-intent

- An evaluation determination has been performed confirming that this Command Media implements BNI quality requirements as tracked in the Programmatic Requirements Management System (PRMS).
 - Minor revision, but PRMS complete due to being overdue.
- This revision incorporates the changes identified in and supersedes:
 - PRCN-Y17-95-64-874-R02-01
 - PRCN-Y17-95-64-874-R02-02
- No forms were changed with this revision.
- Updated qualification requirements for Qualified Riggers.
- Corrected references.
- Editorial changes.

Revision 2 ☐ Major intent ☒ Minor intent ☐ Non-intent

- Procedure is revised to current procedure template and to clarify roles and responsibilities interfacing with UPF Training. The procedure is revised to align with 4MP-T81-01902.
- Appendix A, Qualifications Process, is removed.
- Reference section has been revised to include the correct source and interfacing references.
- New forms, CFN-1242 and CFN-1246, are created, effective on the date of this revision.
- Revision bars used

Previous revisions on record

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1.0 INTRODUCTION

1.1 Purpose

The purpose of this procedure is to define the required competencies of Riggers, Signalpersons, and Competent Person Riggers (CPRs) on the Uranium Processing Facility (UPF) Construction jobsite and to define processes by which they are to be qualified and approved to work.

In order to ensure that every lifting operation is properly planned by a competent person, is appropriately supervised, and is carried out in a safe manner, Y17-95-64-871, *UPF Construction Hoisting and Rigging Work Operations*, requires that all persons involved in rigging operations be qualified to perform their assigned task. This procedure supports the Integrated Safety Management System (ISMS); it defines the standard work process procedures to be followed at the UPF construction sites when conducting construction rigging work operations to ensure the safe and efficient execution of lifting and construction transportation activities.

1.2 Scope

This procedure is applicable to all construction rigging work operations performed under the administrative control of the UPF Construction organization.

Applicability to subcontractor employees is as specified in subcontract language.

2.0 RESPONSIBILITIES

2.1 UPF Site Manager

The UPF Site Manager is responsible for ensuring that the requirements of this procedure are properly implemented.

2.2 Bechtel Equipment Operations Rigger Qualification Program Coordinator

The Bechtel Equipment Operations (BEO) Rigger Qualification Program Coordinator (RQPC), or appointed BEO designee, is responsible for:

- Coordinating with Project Management all activities pertaining to the certification and qualification of Competent Person Rigger Trainer (CPRT) candidates and CPRTs.
- Appointing Master Trainers to conduct CPRT courses and qualify CPRT candidates.
- Maintaining the listing of CPRTs on the BEO website.
- Developing, maintaining, updating, and controlling qualification course materials and examinations.
- Understanding industry standards and trends.
- Assessing, on request, whether non-accredited Qualified Rigger/Signalperson qualification programs are acceptable as meeting the requirements of this procedure.

UPF Rigger, Signal Person, and Competent Person Rigger Qualification
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NOTE: *The requirement for reviewing and approving alternate qualification programs should be identified and recognized during the bid stage and project pre-mobilization planning.*

2.3 Competent Person Rigger Trainer

The CPRT is responsible for:

- Working with UPF Training to screen rigging personnel before they start work to ensure they hold the necessary qualifications.

NOTE: *The requirement for a CPRT on the jobsite should be identified and recognized during the bid stage and project pre-mobilization planning, and included in the field non-manual staffing plan (for the estimated duration).*

- Qualifying CPRs at the Bechtel jobsite/facility.
- Conducting training for candidates who will be (re)qualified as CPRs.
- Testing Bechtel employed CPRs at a Bechtel jobsite/facility
 - Testing CPR candidates—note that the CPRT is not authorized to change the content of the written or practical CPR tests without approval of the BEO RQPC.
 - Controlling the written test materials and qualification cards.
 - Ensuring the qualification documentation is routed to the BEO RQPC and UPF Training for recording.
- Controlling and distributing the qualification cards upon completion of the CPR training and testing.
- Presenting the Rigging Safety Fundamentals course as an instructor-led introduction or refresher course if not presented as a video (e.g., if required in languages other than English).
- Verifying qualifications of subcontractor employees proposed as CPRs in accordance with this procedure.

2.4 Competent Person Rigger

The duties and responsibilities of a CPR shall be in accordance with Y17-95-64-871.

2.5 UPF Training

UPF Training is responsible for maintaining a site register of approved personnel using a Project-approved training and/or personnel tracking system.

3.0 WORK PROCESS

3.1 Site Rigging Introduction

- 3.1.1 All personnel (including subcontractors) whose job is in any way involved with lifting/transportation or is impacted by these activities including, but not limited to, the following are required to take the UPF Rigging Safety Fundamentals course before starting work (e.g., lifting supervision, lifting with a crane, spotting for crane operations, rigging):
- Craft
 - Craft supervision
 - Field Engineers
 - Managers
 - Safety personnel.
- 3.1.2 UPF Training ensures this training is provided annually.
- 3.1.3 Persons whose job is directly rigging-related are required to pass the post-training knowledge test. Persons not meeting the minimum passing score will be permitted to repeat the course and test again. It is required to pass the post-training knowledge test to become a “Qualified Rigger/Signalperson.”
- 3.1.4 UPF Training shall schedule and track this course and record test results with the assistance of a suitably qualified Project Rigging Engineer (PRE) or Superintendent, if required (e.g., if it is necessary to present the course as instructor led).

3.2 Qualified Riggers/Signalpersons Qualification Process

- 3.2.1 In accordance with Y17-95-64-871, all persons who “rig” or directly supervise Riggers are required to be Qualified Riggers (with the exception of Riggers who are in training working under the direct supervision of a Qualified Rigger). The minimum qualification standard is Union-issued Journeyman Rigging Certificate or passing a recognized “Basic Rigger” course held by an accredited testing organization with jurisdiction of that location or in the United States of America.
- 3.2.2 Accredited testing organizations include the National Center for Construction Education and Research (NCCER) and National Commission for the Certification of Crane Operators (NCCCO). Companies such as North American Crane Bureau (NACB) and others are licensed to administer NCCER courses.
- 3.2.3 All Qualified Riggers are also required to be Qualified Signalpersons.
- 3.2.4 The Qualified Evaluator shall complete CFN-1242, *Qualified Rigger/Signalperson Qualification Record*, to submit to UPF Training.
- 3.2.5 Qualified Riggers/Signal Persons are to be identified with one of the following ways:
1. Color-coded hardhat stickers with expiration date noted.
 2. Training cards issued by UPF Training to craft with expiration date noted.

3.3 Competent Person Rigger Qualification Process

3.3.1 Process

- In accordance with Y17-95-64-871, certain tasks require an advanced rigger qualified as a UPF “Competent Person Rigger.” The CPR qualification is an internal qualification for advanced Riggers; passing the course ensures not only advanced rigging skills, but lift planning ability, comprehensive knowledge of reading and understanding crane charts and crane use, man-basket lift requirements, and knowledge of UPF Construction rigging procedures, including but not limited to, specific requirements for operating near power lines and medium/critical lift plan requirements.
- Candidates shall be advanced (qualified) riggers, nominated by their supervisor as having the required experience, ability, and personal characteristics. They must meet the eligibility requirements contained in **Appendix B, Competent Person Rigger Eligibility Requirements**.

3.3.2 Approval

- UPF Riggers will be approved to work onsite as a CPR if they hold a current Rigger qualification from an approved certifying entity and they successfully complete the UPF CPR program.
- Subcontractor-employed Riggers will be approved to work onsite as a CPR if they qualify as noted in **Section 3.3.1, Process**, and they hold a current Rigger qualification from an approved certifying entity.

3.4 Qualification Documentation and Maintenance

- Qualified (Advanced) Riggers can apply for the CPR program through UPF Training. Qualified Riggers shall have their qualification verified by an accredited testing organization such as the NCCER or NCCCO. Union-issued Journeyman Rigging Certification is not acceptable to obtain CPR qualification.
- Requirements for successful completion of the CPR course include:
 - Completion of the CPR Course
 - Passing the written and practical examinations
 - Written Core Competency Exam – minimum passing score 48/60
 - Rigger Practical Test – minimum passing score 80/100
 - The results of the written and practical exams are recorded on CFN-1246, *Competent Person Rigger Qualification Record*.
 - The examinations are developed and controlled by the BEO RQPC) and are conducted at site by a CPRT.
 - Demonstrate knowledge of applicable jurisdictional codes, standards, and regulations (e.g., American National Standards Institute [ANSI]/Occupational Safety and Health Administration [OSHA]) for rigging operations)

UPF Rigger, Signal Person, and Competent Person Rigger Qualification

- Demonstrate knowledge of applicable Bechtel Environmental, Safety & Health (ES&H) Core Processes. The CPRT reports the results of all successful qualifications to UPF Training to add to a site register of approved CPRs. The register should include all UPF Construction and subcontractor approved CPRs, including the following:
 - Name
 - Date of qualification
 - Expiration of qualification
 - Date of *UPF Rigging Safety Fundamentals* course
 - CPR qualification number
 - Name of qualifying CPRT
- The CPRT, or designee, onsite will issue Project-specific certificates to successful UPF CPRs and complete CFN-1246 to submit to UPF Training.
- Once qualified, CPRs must requalify every five years. Requalification requires taking the CPR course and subsequent test again.
- The CPRT or CM can revoke or suspend a CPR qualification at any time (e.g., following an accident or incident pending the results of an investigation).

3.5 Competent Person Rigger Trainer Qualification Process

3.5.1 Process

- A qualified CPRT (e.g., engineer, supervisor, or superintendent) is required in order to implement the CPR program. The CPRT qualification allows an individual to:
 - Review the competency qualifications of prospective CPRs onsite as part of the screening process.
 - Conduct the CPR Course at site and test UPF CPR candidates.
- The CPRT qualification is held by an individual whose experience, education, background, and training have been assessed as meeting the criteria for a CPRT contained in this procedure. CPRTs are qualified by a Master Trainer who is qualified by BEO; a listing of CPRTs and Master Trainers is maintained by BEO.

3.5.2 CPRT Course Eligibility requirements

- The CPRT course is led by a Master Trainer; it is the CPR course supplemented by additional knowledge checks. Eligibility requirements are:
 - Qualification as a CPR—this may be done at the same time if the candidate is not an existing CPR.
 - Possess a minimum of five years of experience in heavy rigging and extensive knowledge of rigging equipment, techniques, and codes/regulations/legislation.
 - Submit documentation of work experience and training.
 - Have training/presentation skills.

UPF Rigger, Signal Person, and Competent Person Rigger Qualification

3.5.3 CPRT Course Completion Requirements

- Demonstrating in-depth knowledge and understanding of the Competent Person Rigger Course–Instructor Guide.
- Demonstrating presentation skills.
- Demonstrating understanding of the CPR testing and certification process and the responsibilities of a CPRT, including the administration of the written test and practical examination.
- Demonstrating knowledge of applicable jurisdictional codes, standards, and regulations (e.g., ANSI/OSHA) for rigging operations.
- Demonstrating in-depth knowledge of applicable Bechtel ES&H Core Processes and Rigging procedures.
- Familiarity with the content of the *UPF Rigging Safety Fundamentals* course and demonstrating the capability of presenting it, should that be required.
- Successful CPRT qualifications are reported to BEO so they can be added to the CPRT listing on the BEO website.
- Upon successful testing and certification, CPRTs are authorized to qualify CPRs under this procedure.
- PRCN 01 BEO RQPC can revoke CPRTs certification at any time.

4.0 RECORDS

Records generated by this Document shall be maintained in accordance with Y15-95-800, *UPF Document Management*.

The following records generated are:

Record or Form Number	Record Title	System/Location	Document Type
CFN-1242	<i>Qualified Rigger/Signalperson Qualification Record</i>	InfoWorks	TQR
CFN-1246	<i>Competent Person Rigger Qualification Record</i>	InfoWorks	TQR

5.0 REFERENCES**5.1 Source References**

4MP-T81-01902, *Rigger, Signalperson, & Competent Person Rigger Qualification*
 ANSI A10.42, *Rigging Qualifications and Responsibilities in the Construction Industry*
 ANSI B30.5, *Safety Code for Crawler, Locomotive and Truck Cranes*, Chapter 5
 Bechtel Rigging Handbook
 DOE-STD-1090, *DOE Hoisting and Rigging Manual*
 OSHA 29 CFR 1926.1400-1442
 OSHA 29 CFR 1926.550, *Cranes and Derricks*

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UPF Rigger, Signal Person, and Competent Person Rigger Qualification
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PL-CM-801768-A001, *Construction Management and Execution Strategy*

Y17-95-64-800, *UPF Construction Work Control Program*

Y17-95-64-872, *UPF Crane Use and Operation*

Y17-95-64-873, *UPF Qualification of Construction Crane Operators*

5.2 Interfacing References

OSHA 29 CFR Part 1926, *Cranes and Derricks in Construction; Final Rule*

Y15-95-800, *UPF Document Management*

Y17-95-64-871, *UPF Construction Hoisting and Rigging Work Operations*

6.0 SUPPLEMENTAL INFORMATION

Appendix A, *Acronyms and Definitions*

Appendix B, *Competent Person Rigger Eligibility Requirements*

APPENDIX A

Acronyms and Definitions

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Acronyms

ANSI	American National Standards Institute
BEO	Bechtel Equipment Operations
CPR	Competent Person Rigger
CPRT	Competent Person Rigger Trainer
DMC	Document Management Center
ES&H	Environmental, Safety & Health
ISMS	Integrated Safety Management System
NCCA	National Commission for Certifying Agencies
NCCCO	National Commission for the Certification of Crane Operators
NCCER	National Center for Construction Education and Research
OSHA	Occupational Safety and Health Administration
PIC	Person in Charge
PRE	Project Rigging Engineer
RQPC	Rigging Qualification Program Coordinator
RS	Rigging Supervisor
UPF	Uranium Processing Facility

Definitions

Accredited Testing Organization	<p>An organization that is accredited to qualify Riggers and/or Signalpersons by a “nationally recognized accrediting agency,” that is “an organization that, due to its independence and expertise, is widely recognized as competent to accredit testing organizations”</p> <p>The National Commission for Certifying Agencies (NCCA) and ANSI are such organizations; accredited testing organizations include, but are not limited to, the NCCER and NCCCO.</p>
Lifting Device	Any manual or powered machine used to lift a load; such devices include, but are not limited to, the following: crane, winch/“tugger,” chain fall, hydraulic or mechanical jack, levers, pulley system, beam launcher
Person in Charge (PIC)/Appointed Person/Lift Director	An individual appointed to have control and responsibility of a lifting/hauling operation on behalf of the Project to ensure safe implementation of the work operations; the qualifications required to perform the duties of a PIC escalate with increasing levels of risk categorization (see Y17-95-64-871)

APPENDIX A Acronyms and Definitions

(Page 2 of 2)

Qualified Evaluator	An individual who has demonstrated, or through a certificate from an accredited testing organization, that he/she is competent in accurately assessing whether another individual is qualified to be a Rigger and/or Signalperson
Qualified Person	<p>An individual who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training, and experience, successfully demonstrated the ability to solve/resolve problems relating to the subject matter, the work, or the Project</p> <p>The definition of Qualified Person is taken from OSHA 29 CFR Part 1926, <i>Cranes and Derricks in Construction; Final Rule</i>. The UPF Project's position regarding this OSHA definition is to qualify an individual through an accredited program (i.e., possession of a recognized certificate). It shall be verified whether organizations have accredited programs (such as the NCCCO and NCCER). Current programs may meet the intent of OSHA 29 CFR Part 1926; however, UPF shall confirm, through documented evidence, that an individual has extensive knowledge, training, and experience. The requirements described in this procedure will govern as additional accredited programs are issued.</p>
Qualified Rigger	A Rigger who meets the criteria for a "qualified person" has been assessed by a Qualified Evaluator, has completed advance rigger training and holds a certificate from a recognized accredited testing organization, and has a minimum of four years of practical "hands-on" experience.
Qualified Signalperson	A signalperson who meets the criteria for a qualified person, has been assessed by a Qualified Evaluator, has a minimum of four years of practical "hands-on" experience, and holds a certificate from a recognized accredited testing organization
Rigging	<p>For the purpose of this procedure, rigging is defined as:</p> <ul style="list-style-type: none"> • The hardware or equipment used to safely attach a load to a lifting device • The process of safely attaching a load to a hoist by means of adequately rated and applied slings. <p>Slings include wire ropes, chains, synthetic web, and metal mesh made into forms, with or without fittings and other approved tools/materials, for handling suspended loads.</p>
Rigging Personnel	Any Project employee (including any discipline craft employees) whose job duties and responsibilities may, during the course of a workday, include the preparation of a load for safe movement, selecting components to be used in the movement of a load, and participation in the movement or supervision of the movement of the load (vertically or horizontally)
Rigging Supervisor (RS)	An individual assigned responsibility for planning and supervising rigging work on a project, including lifting operations and site heavy haulage; qualified by virtue of knowledge, experience, and demonstrated technical skills, and should be a CPR, and may be a UPF Construction or a subcontractor employee
Signalperson	An individual who directs the movement of a lifted load to the crane operator

APPENDIX B

Competent Person Rigger Eligibility Requirements

To be eligible to be sponsored as a Competent Person Rigger candidate, the individual is required to:

1. Demonstrate understanding of both the spoken and written language in use at the jobsite.
2. Have a minimum of five years of “hands-on” experience and demonstrate sufficient skills to apply safe rigging practices and principles.
3. Demonstrate proof of current NCCER or NCCCO or equivalent advanced rigger certification.
4. Recognize the load's center of gravity and the importance of load balance.
5. Demonstrate the ability to utilize proper rigging materials and principles.
6. Demonstrate knowledge and skill in the selection, inspection, safe use, and limitations of the following, if applicable, to the employee's specific job tasks:
 - Anchor points and deadmen
 - Synthetic ropes for rigging
 - Wire rope
 - Chains
 - Reeving
 - Spreader bars and equalizing beams
 - Synthetic slings
 - Lifting points
 - Tuggers and winches (manual and power)
 - Bars and levers
 - Come-a-longs
 - Fiber rope for rigging
 - Jacks, jacking systems, and rams
 - Wire rope slings
 - Rigging hitches and knots
 - Hooks, latches, and similar attachment devices
 - Shackles
 - Eye bolts
 - Turnbuckles
 - Links and rings
 - Plate clamps
 - Softeners
 - Cable dogs/grips
 - Chain hoists
 - End fittings including swages, sockets, splices, connectors, clips, and clamps
7. Demonstrate the standard hand signals for controlling crane operations.
8. Demonstrate the proper application of tag lines and their importance in safe lifting operations.
9. Be familiar with the personal protection requirements for safe lift operations, including hard hats, eye protection, gloves, protective footwear, and personal fall arrest equipment.