

# P Health and Safety Plans

# P-1 Safety Program File



# Ball Hill Wind Project Safety Program File

Document:

Revision: 01

This Procedure has been prepared by Renewable Energy System Americas Inc. ("RES") in accordance with internal procedures and mandates and is Confidential Information. If this Procedure is an exhibit to a contract or agreement, then this Procedure, in the form attached to the contract, shall be subject to only those express representations or warranties regarding the exhibits to such contract, if any. Except for such representations, RES provides this Procedure "AS-IS" and does not represent, and RES expressly disclaims, that the procedures or material contained in this Procedure have been prepared pursuant to any particular methodology, are accurate or complete, or that they reflect the current status of applicable law. Portions of this Procedure may be excerpted or redacted and this Procedure is subject to revision or update at any time. Any party utilizing this Procedure, or any matter or information derived from it, ("Recipient") does so at his/her/its own risk and agrees to make his/her/its own investigation regarding his/her/its legal or other obligations for performance of his/her/its work. No Recipient shall have any right or claim against RES or any of its affiliated companies with respect to the Procedure.

Ball Hill Wind Project		
TITLE:	DOC No:	REV No: 01
Safety Program File	PAGE: 1 of 17	DATE: 10/18/16

# **Revision History**

Revision #	Date	Nature of Revision
01	10/18/2016	Document first created.

Ball Hill Wind Project		
TITLE: DOC No: REV No: 01		
Safety Program File	PAGE: 2 of 17	DATE: 10/18/16

# **TABLE OF CONTENTS**

1.0	PURPOSE	4
2.0	DESCRIPTION OF THE PROJECT	4
2.1	Project Description and Program Details	4
2.2	Site and Soil Investigation	4
2.3	Ground Conditions	5
2.4	Surrounding Land Uses	5
2.5	Instructions for Site Safety Supervisors Setting Up a New Jobsite	5
3.0	REFERENCES	5
4.0	SAFETY PROGRAM FILE REQUIREMNTS	5
4.1	Appointing as a RES Safety Supervisor	5
4.2	Liaison between RES Safety Supervisor and the Subcontractor	5
4.3	Organizational Structure	6
4.4	Monitoring of Subcontractors	7
4.5	The Exchange of Safety Information Between RES and Subcontractors	7
4.6	Site Security and Accessing the Site	7
4.7	Site Safety Inductions	8
4.8	First Aid Provisions	9
4.9	Site Accommodations	10
4.10	0 Project Signage	10
5.0	APPENDICES	10
5.1	Local/State/Federal Permits	11
5.2	Site Safety Rules and Passports	11
5.3	Emergency Response Plan	11
5.4	Subcontractor Prequalification	11
5.5	Insurance Documentation	11
5.6	Safety Training Records	11
5.7	Site Safety Meetings	12
5.8	Safety Data Sheets	12
5.9	Job Hazard Analysis (JHA) and/or Risk Assessments	12
5.10	0 Permits to Work	13
5.11	1 Incident and Near Miss Records	13
5.12	2 Safety Audits/Inspections/Observations	13
5.13	3 Warning Strikes (Three Strikes Rule) and Zero Tolerance	13

Ball Hill Wind Project		
TITLE:	DOC No:	REV No: 01
Safety Program File	PAGE: 3 of 17	DATE: 10/18/16

5.14	Work at Height and Rescue Procedures	14
5.15	Lift Plans and Review Documentation	15
5.16	Site Specific Safety Requirements	15

Ball Hill Wind Project		
TITLE:	DOC No:	REV No: 01
Safety Program File	PAGE: 4 of 17	DATE: 10/18/16

# 1.0 PURPOSE

The purpose of the Safety Program File is to provide guidance to those responsible for managing health and safety on RES projects/sites.

The Safety Program File will also serve as a filing mechanism for the documentation generated as a result of implementing the RES Safety Management System.

All of the Safety Procedures referenced in this document can be found in the <u>RES Safety Management System</u>. Hard copies (uncontrolled) can be provided by the Safety Supervisor if/when needed.

# 2.0 DESCRIPTION OF THE PROJECT

# 2.1 Project Description and Program Details

Name:	Ball Hill Wind Project	
Address:	Chautauqua County, New York.	
Client:	TBD (currently RES development site)	
RES Project Number:	23105	
Start Date:	Summer 2017	
Projected End Date:	December 2018	
Type:	Wind Solar Transmission Storage	
If Other, describe:		
Generating Capacity:	100MW	

Renewable Energy Systems (hereafter referred to as "RES") is constructing a 100 MW wind project at Chautauqua County, New York. The site is currently used for agricultural purposes.

The works will comprise the erection/installation of 29 Vestas V126-3.45MW Turbines, the construction of associated foundations, access tracks and electrical infrastructure and the applicable grid connection.

The elements of the site works for the RES project shall comply with all federal and state regulatory requirements.

# 2.2 Site and Soil Investigation

Ball Hill Wind Project		
TITLE:	DOC No:	REV No: 01
Safety Program File	PAGE: 5 of 17	DATE: 10/18/16

A site/soil investigation shall be carried out and made available to all subcontractors. The information contained in the site investigation report is indicative and Subcontractors shall satisfy themselves in respect of the adequacy of the information provided.

The site/soil investigation report shall cover information applicable to the Project on soil investigation, ground contamination, ground stability, and underground hazards.

#### 2.3 Ground Conditions

All vehicles shall use the site roads as designated for the project. Subcontractors using cranes shall inspect the site roads and crane pads to satisfy themselves that there is no risk to the stability of the cranes.

# 2.4 Surrounding Land Uses

The surrounding land is primarily used for agricultural purposes.

# 2.5 Instructions for Site Safety Supervisors Setting Up a New Jobsite

Each Safety Supervisor shall use the <u>Checklist for Safety Supervisors Establishing a New Project</u> (01199-001608) to establish the RES Safety Management System for a project.

# 3.0 REFERENCES

All procedures and/or templates referenced within this document are available on the ECM within the RES Americas Safety Management System.

# 4.0 SAFETY PROGRAM FILE REQUIREMNTS

# 4.1 Appointing as a RES Safety Supervisor

The Project Manager, in conjunction with RES Corporate HSQE, shall appoint a competent member of the project team to act as the Safety Supervisor. The Safety Supervisor shall then be responsible for ensuing application of the RES Safety Management System at the project, and for liaising with all subcontractors on health and safety matters.

# 4.2 Liaison between RES Safety Supervisor and the Subcontractor

Every subcontractor on site shall appoint a competent person, with appropriate authority, to be responsible for ensuring compliance with health and safety requirements for the project. Subcontractor Safety personnel shall attend any and all RES required project safety meetings, and shall:

1) Enter discussions on health and safety matters.

Ball Hill Wind Project		
TITLE:	DOC No:	REV No: 01
Safety Program File	PAGE: 6 of 17	DATE: 10/18/16

- 2) Evaluate hazards for their respective work scopes, as well as hazards to other contractors who work may be impacted.
- 3) Coordinate with other contractors (facilitated by the RES Safety Supervisor) to communicate the information necessary to enable these third parties to ensure the health and safety of themselves and any employees.
- 4) Provide proof of instruction and training of subcontractor employees as required.
- 5) Respond and act on any Safety Management System instructions from RES as necessary to fulfil their duty

The Safety Representative appointed by each Subcontractor shall attend all RES sponsored safety meetings as requested, or shall send an alternate with the same authority to affect Safety Management System application. RES reserves the right to replace a Subcontractor's Safety Representative for lack of attendance, participation, or action on RES Safety Management System directives.

Subcontractors shall also report any safety related concerns during the Plan of the Day meetings (POD) normally held every morning prior to work commencing for the day.

# 4.3 Organizational Structure

The chart below depicts the typical reporting structure for RES projects/sites.



The RES Safety Supervisor shall be responsible for managing the RES Safety Management System at the project/site. Program direction and administrative support shall be provided by RES Corporate HSQE. Day-to-day functional direction shall be from the RES project/site manager.

Ball Hill Wind Project		
TITLE:	DOC No:	REV No: 01
Safety Program File	PAGE: 7 of 17	DATE: 10/18/16

The RES Safety Supervisor shall ensure that any actions identified by the Project Manager, are communicated to all site employees and shall then monitor for effective compliance.

# 4.4 Monitoring of Subcontractors

Subcontractor performance/compliance with RES Safety Management System shall be monitored throughout the life of the project by RES Safety Supervisor supported by all RES project employees.

Where the performance of a Subcontractor is not acceptable, they shall be informed in writing. Where necessary, a Subcontractor shall be stopped from working and may be removed from site.

# 4.5 The Exchange of Safety Information Between RES and Subcontractors

All Subcontractors shall be responsible to promptly provide to RES any such information that might affect the health and safety of workers or members of the public. Exchange of information between subcontractors shall take place at the weekly RES hosted Safety Meetings and POD Meetings.

However, if between meetings a Subcontractor identifies safety related issues, they shall communicate these issues directly to the RES Safety Supervisor so that the issues can be communicated across the project, where appropriate.

# 4.6 Site Security and Accessing the Site

# 4.6.1 Site Security

RES shall provide basic security for the project to control access, and to provide a basic deterrent to theft or vandalism. However, each subcontractor shall be responsible to provide appropriate controls to leave their works in a condition that will not give rise to a safety risk to members of the public on the site (whether authorized or unauthorized) and are to protect their materials, equipment, and works against theft and vandalism.

The following steps will be taken to prevent unauthorized entry:

[TBD - Safety Supervisor shall detail site specific controls and procedures here, which will vary from site to site and contract to contract].

# 4.6.2 Landowner Requirements

[TBD - Enter details of any Landowner requirements based on BOP/EPC contract including any hunting restrictions, livestock controls, restricted areas, etc. that will be encountered].

# 4.6.3 Entrance to the Site (Existing Highway/Traffic Systems and Restrictions)

Ball Hill Wind Project		
TITLE:	DOC No:	REV No: 01
Safety Program File	PAGE: 8 of 17	DATE: 10/18/16

[TBD - Enter details about surrounding roads and access to the site and any restrictions to be imposed, e.g., no heavy trucks entering or leaving the main highway during specified times, no deliveries accepted after a specific time].

# 4.6.4 Vehicle Operations

No vehicles other than authorized site vehicles shall be permitted to access beyond the site office compound onto the construction site. Parking off road is not permitted.

The following vehicle operation rules shall be strictly enforced by RES:

- 1) Site speed limit shall be \_\_\_\_mph.
- 2) Compound speed limit shall be \_\_\_ mph.
- 3) When parked, all vehicles shall be reversed into the parking spot so that the operator can exit from the area in a forward direction. This may require initially backing into the area to park the vehicle.
- 4) All vehicles shall sound horn (once) or actuate a back-up alarm when backing.
- 5) All vehicle operators shall use a spotter to assist in backing a vehicle. The exception will be automobiles or pickups with unimpeded views of the area they are backing into. However, the operator shall make a visual inspection of the area before commencing the backing maneuver.

# 4.6.5 Use of UTVs and Off Road Driving

There shall be no off-road driving unless approved by RES.

UTVs shall be the only authorized all-terrain vehicle to be used on RES sites.

# 4.7 Site Safety Inductions

4.7.1 Employees (RES, RES Managed Subcontractors, Owners, and Owner Subcontractors)

No employee shall be allowed access to a RES project/site until they have received site safety induction. The content and structure of a site safety induction shall be governed by <a href="RASOP 010 - Site Safety Passport">RASOP 010 - Site Safety Passport</a>. A site safety induction shall be of approximately 2-3 hour duration.

Site Safety Inductions shall be conducted by the RES Safety Supervisor (or designee) addressing RES Safety Management System contents, requirements, and safe work expectations. Following completion of the site safety induction, workers will receive a site passport which will allow access to the site. A hardhat sticker will also be issued at that time which will designate the individual employees experience level and capability/authority to operate equipment.

Ball Hill Wind Project		
TITLE:	DOC No:	REV No: 01
Safety Program File	PAGE: 9 of 17	DATE: 10/18/16

# 4.7.2 Delivery Drivers

Delivery drivers shall be provided an abbreviated site safety induction (approximately 15 minutes) and shall thereafter be issued a vehicle passport and a hardhat sticker designating them as a delivery driver. Generally, delivery drivers shall be escorted at all times while on a RES site by the subcontractor to whom the delivery is being made. All delivery drivers shall report to the main RES compound prior to initiating a delivery, unless otherwise authorized by the RES Safety Supervisor.

# 4.7.3 Languages

All employees should be able to communicate in English when working on a RES project. However, if a subcontractor employee does not speak or understand English well, the subcontractor shall be responsible for providing an interpreter for both verbal and written communication of Safety Management System requirements and expectations. The interpreter shall be provided by the company employing the individuals concerned.

# 4.7.4 Visitors

All visitors shall be provided with an abbreviated site safety induction, and shall be accompanied at all times by an authorized site employee. The person accompanying the visitors shall ensure that the visit is recorded in the visitor's book or site diary (gate guard log) as detailed in RASWP 007 - Visitors.

# 4.8 First Aid Provisions

# 4.8.1 First Aid Equipment

First Aid equipment and supplies shall be available in sufficient quantities to respond to all employees at the project/site. RASWP 013 - First Aid shall govern first aid requirements for the project/site.

At a minimum, a first aid kit, eyewash unit, and defibrillator shall be available at the RES Safety Trailer which shall be the RES Safety Supervisor's office.

Additional first aid kits shall be available at strategic locations within the project, including within all site vehicles.

The RES Safety Supervisor shall ensure that a suitable number of employees at the project/site are trained in First Aid/CPR/AED.

Each subcontractor shall be responsible to provide first aid equipment (e.g., kits, defibrillators) and a suitable number of employees trained in First Aid/CPR/AED based on the requirements in RASWP 013 - First Aid. Each subcontractor shall meet these requirements individually.

Ball Hill Wind Project		
TITLE:	DOC No:	REV No: 01
Safety Program File	PAGE: 10 of 17	DATE: 10/18/16

# 4.9 Site Accommodations

# 4.9.1 Site Trailers and Infrastructure

RES will establish a common site compound which will allocate space for a subcontractor office trailer and parking for a stated number of subcontractor vehicles. Electricity and communications links will be provided.

Each subcontractor shall be individually responsible for their own office and communication facilities, utility connections, and utility expenses.

# 4.9.2 Sanitary Facilities

Sanitary facilities (toilets and wash stands) shall be available in sufficient quantities to respond to all employees at the project/site. Each subcontractor shall be individually responsible for providing sufficient facilities for their staff.

The RES Safety Supervisor shall coordinate the number and location of sanitary facilities to be deployed at the project/site. Subcontractors shall comply with directives of the RES Safety Supervisor regarding numbers and deployment of portable sanitary facility units.

# 4.9.3 Drinking Water

Drinking water shall be available in sufficient quantities to respond to all employees at the project/site. Each subcontractor shall be individually responsible for providing sufficient quantities of drinking water for their staff.

Subcontractors shall comply with directives of the RES Safety Supervisor regarding numbers and deployment of drinking water.

In addition, an adequate supply of electrolyte solution and ice shall be made available during times when heat stress may become a hazard.

#### 4.9.4 Sun Block

Sun block shall be available in sufficient quantities to respond to all employees at the project/site, as requested. Each subcontractor shall be individually responsible for providing sufficient quantities for their staff.

# 4.10 Project Signage

Guidance on safety signage required on RES projects can be found in the <u>Work</u> <u>Instruction for Safety Signage</u>.

#### 5.0 APPENDICES

Ball Hill Wind Project		
TITLE:	DOC No:	REV No: 01
Safety Program File	PAGE: 11 of 17	DATE: 10/18/16

Placeholders shall be created as appendices to the Safety Program File for the hard copy documentation that is generated as a result of implementing the RES Americas Safety Management System.

Labeling of the place holders shall be consistent with the folder structure of the Safety Program File for the project/site on the ECM.

# 5.1 Local/State/Federal Permits

5.1.1 Copies of the local/state/federal permits required for construction scope of work shall be maintained in this section.

# 5.2 Site Safety Rules and Passports

5.2.1 Copies of the Site Safety Rules and Passports shall be created from the Construction Site Passport template and issued for use.

# 5.3 Emergency Response Plan

- 5.3.1 An Emergency Response Plan shall be produced for each RES project/site. It shall be developed using RASOP 006 Emergency Response Procedure.
- 5.3.2 A copy of the plan shall be provided to all local emergency services near the project/site.

# 5.4 Subcontractor Prequalification

5.4.1 RES has contracted with <u>Avetta</u> to manage and maintain each subcontractor Prequalification (PQF). RES requires all contractors/subcontractors (new and current) to successfully complete the Environmental, Health, and Safety qualification process through Avetta. Only those contractors who successfully complete the process will be qualified to do work for RES.

# 5.5 Insurance Documentation

- 5.5.1 Each contractor shall provide RES with a copy of their Certificate of Insurance (COI) where RES is named as the Certificate Holder.
- 5.5.2 RES Risk Management shall verify that subcontractors have sufficient coverage limits.
- 5.5.3 Copies of the COIs shall be maintained onsite, in the Avetta Database, or on the ECM.

# 5.6 Safety Training Records

Ball Hill Wind Project		
TITLE:	DOC No:	REV No: 01
Safety Program File	PAGE: 12 of 17	DATE: 10/18/16

Records of all training for operating tools and machinery, as well as any on the job training, shall be retained as part of the Safety Program File. Copies of all subcontractor employee training records shall be submitted to RES at the time of the employee's site safety induction. This includes all OSHA documented training requirements.

# 5.7 Site Safety Meetings

- 5.7.1 All contractors are required to start each shift with a coordination/planning/tailgate meeting that includes discussion on a health and safety related topic, review of incidents, and/or lessons learned from a previous experience.
- 5.7.2 Site Safety Meetings shall be conducted weekly and shall be chaired by the RES Safety Supervisor. These safety meetings shall be held to discuss recent safety incidents, the corrective actions undertaken, and the preventative measure established to preclude recurrence. Trends as to causal factors shall be discussed among the safety representatives present. Meeting minutes shall be taken and retained as records.
- 5.7.3 All Hands Meetings shall be held at least weekly and shall be led by the RES Project Manager, supported by the Safety Supervisor. These meetings shall focus on communicating recent incidents, causal factors, and trends, and shall also serve as a forum for employees to raise safety issues. Guest speakers should be brought in to discuss safety topics, and project performance should also be discussed. A written agenda should be prepared by the Project Manager, and the content of the meeting should be posted on the announcements board in advance of the meeting. All employees shall sign an attendance roster, and an accountability of subcontractor employee attendance should be made.

# 5.8 Safety Data Sheets

- 5.8.1 Safety Data Sheets for substances used on the Project shall be filed in the Safety Program File or equivalent binder. Copies of SDSs shall be made available to subcontractors as necessary. The RES Site Safety Supervisor shall be responsible for maintaining the SDS system, as detailed in RASWP 004 Hazard Communication.
- 5.8.2 Where a subcontractor maintains an electronic database of SDS, a copy of the index shall be retained by the RES Safety Supervisor.

# 5.9 Job Hazard Analysis (JHA) and/or Risk Assessments

Job Hazard Analysis (JHA) and/or Risk Assessments shall be completed for all scopes of work, access, hazardous flora/fauna, etc.

Ball Hill Wind Project		
TITLE:	DOC No:	REV No: 01
Safety Program File	PAGE: 13 of 17	DATE: 10/18/16

5.9.1 Subcontractors shall perform their own JHA and/or risk assessments and provide copies to the RES Safety Supervisor upon request.

#### 5.10 Permits to Work

The RES Project Manager, or their designee, shall be responsible for managing permits to work for excavation, hot works, blasting, and any other operations requiring a permit. Copies shall be logged and retained.

- 5.10.1 Excavation permits may not exceed one week in duration. The RES Americas Blasting Checklist shall be completed with the Blasting Permits.
- 5.10.2 For Electrical Work Permits, the RES Americas Senior HV Authorized Person can issue permits. This is to include the Limitation of Access into the Substation.

# 5.11 Incident and Near Miss Records

All incidents shall be reported to RES and the client, where appropriate. Copies of reports should be maintained in this section.

5.11.1 Notification, investigation, and documentation shall be completed as detailed in RASOP 001 - Incident Notification, Investigation, and Documentation.

# **5.12** Safety Audits/Inspections/Observations

- 5.12.1 Safety Audits and Inspections shall be completed as detailed in RASOP 008 Safety Audits.
- 5.12.2 Safety Observations shall be completed as detailed in RASWP 052 Safety Walks.
- 5.12.3 RES HSQE Department Safety Audits and any safety consultant's reports received.
- 5.12.4 Site Safety Inspection Form shall be completed twice weekly by the Safety Supervisor/Discipline Supervisor using a section of the form relative to current scope of work.
- 5.12.5 Weekly Safety Inspections completed by Subcontractors.

# 5.13 Warning Strikes (Three Strikes Rule) and Zero Tolerance

5.13.1 The Warning Strike Form shall be used for recording and issuing a strike. A register is also to be used to keep track of names and the number of strikes issued.

Ball Hill Wind Project		
TITLE:	DOC No:	REV No: 01
Safety Program File	PAGE: 14 of 17	DATE: 10/18/16

- 5.13.2 Whenever a safety violation requires a strike, the strike shall be issued by the supervisor for that scope or work. A copy shall be provided to the person receiving the strike.
- 5.13.3 RES Americas applies a Three Strike Program at all projects, sites and work locations. Any employee working on a RES Americas site will be permanently removed from that site after violating Site Safety Rules on three occasions.
  - a) First violation The person involved will be given a verbal warning which shall be recorded.
  - b) Second violation The person involved will be given a further warning and sent home for a day without pay.
  - c) Third violation Any employee working on a RES Americas project, site or work location will be permanently removed from that project, site or work location after violating Site Safety Rules on three occasions.
- 5.13.4 RES Americas will implement a "No Tolerance" policy that will result in an automatic Strike to any employee who violates any of the following safety program requirements:
  - a) Failure to comply with required PPE in an active work area.
  - b) Failure to follow the RES Americas policy for vehicle operation while on the project site, including:
    - (1) Use of cell phone (by driver) while operating vehicle or equipment,
    - (2) Operating vehicle or equipment at greater than designated project speed limits,
    - (3) Backing of vehicles or equipment without use of spotter when necessary.
  - c) Failure to have or follow the approved Work Instruction, Method Statement, or Procedure, and/or failure to have or follow the approved Job Hazard Analysis (JHA) for the task.
  - d) Failure to conduct documented daily equipment and truck inspections.
  - e) Operation of any equipment without documented qualification for said equipment.

This is detailed in the Safety Program Improvement Plan.

# 5.14 Work at Height and Rescue Procedures

Ball Hill Wind Project		
TITLE:	DOC No:	REV No: 01
Safety Program File	PAGE: 15 of 17	DATE: 10/18/16

Contractors that work at height shall provide staff trained, qualified, and authorized to perform rescue at height activities. In addition, the following requirements shall be in place:

- 5.14.1 A plan on how rescue is to be performed, documented training on fall hazards, the use of the work at height equipment for their staff, and FA/CPR/AED trained staff.
- 5.14.2 Rescue at height activities shall be conducted in accordance with RASWP 002 Work at Height.
- 5.14.3 All rescue at height personnel shall be trained in the Ropeworks W110 (Safety at Height and Rescue) or equivalent.
- 5.14.4 At least two (2) members of each Erection crew shall hold current rescue at height training certifications (completed within the last calendar year) and current First Aid Training (as of the start of Erection).
- 5.14.5 Staff trained in rescue at height shall have in their possession (at their work location, up tower, etc.) the appropriate rescue and first aid equipment at all times.
- 5.14.6 All equipment used for rescue at height shall have a current and documented inspection (completed within the last six (6) months, as of the start of Erection).
- 5.14.7 The Erection Contractor shall submit a Rescue at Height Plan to RES for review and approval at least two (2) weeks prior to the start of Erection. The Rescue at Height Plan shall be approved for use by RES, prior to the start of Erection.
- 5.14.8 At least one rescue at height drill, based on the Rescue at Height Plan, shall be completed after the start of turbine erection, but before the first tower is mechanically completed.
- 5.14.9 RES will solicit support from the local Emergency Medical Services (EMS) to support a Rescue at Height, if/when needed.

# 5.15 Lift Plans and Review Documentation

- 5.15.1 Contractors performing lifting operations on a RES project/site shall provide RES with a copy of the Lift Plan for the activity. The Lift Plan must be approved for use by a RES Competent Lift Person prior to the start of the activity.
- 5.15.2 The <u>Lifting Operations Evaluation Forms (LOEF Parts 1 & 2)</u> shall be utilized to document the lift plan and lifting activity review.

# 5.16 Site Specific Safety Requirements

Ball Hill Wind Project		
TITLE:	DOC No:	REV No: 01
Safety Program File	PAGE: 16 of 17	DATE: 10/18/16

The Site Specific Safety Requirements related to local regulations, hazards found on the project/site footprint, and client/owner requirements that are not included in the RES Safety Management System, shall be listed in this section.

# P-2 Emergency Response Plan



# **Ball Hill Wind Project Emergency Response Plan**

Report No:

Issue No: 01

This document ("Procedure") has been prepared by RES America Construction Inc. ("RES") in accordance with internal procedures and mandates and is Confidential Information. If this Procedure is an exhibit to a contract or agreement, then this Procedure, in the form attached to the contract, shall be subject to only those express representations or warranties regarding the exhibits to such contract, if any. Except for such representations, RES provides this Procedure "AS-IS" and does not represent, and RES expressly disclaims, that the procedures or material contained in this Procedure have been prepared pursuant to any particular methodology, are accurate or complete, or that they reflect the current status of applicable law. Portions of this Procedure may be excerpted or redacted and this Procedure is subject to revision or update at any time. Any party utilizing this Procedure, or any matter or information derived from it, ("Recipient") does so at his/her/its own risk and agrees to make his/her/its own investigation regarding his/her/its legal or other obligations for performance of his/her/its work. No Recipient shall have any right or claim against RES or any of its affiliated companies with respect to the Procedure.

BALL HILL WIND PROJECT		
TITLE:	DOC No:	REV No: 01
Emergency Response Plan	PAGE: 1 of 25	DATE: 10/18/16

# **Revision History**

Revision #	Date	Nature of Revision
00	09/12/16	Document first created.
01	10/18/2016	Project specific emergency services described.

BALL HILL WIND PROJECT		
TITLE:	DOC No:	REV No: 01
Emergency Response Plan	PAGE: 2 of 25	DATE: 10/18/16

# **CONTENTS**

1.0	INTRODUCTION	3
2.0	PROJECT DESCRIPTION	3
3.0	PROCEDURE	3
3.1	Safety Related Incident/Emergency Notification Procedure	3
3.2	Designated Medical Facility	5
3.3	Damage Incident (No Injury)	6
3.4	Spill Response Procedure	6
3.5	Site Evacuation Procedure	7
3.6	Fire Prevention Procedures	8
3.7	Fire Prevention and Response Equipment Maintenance and Inspections	9
4.0	SAFETY DATA SHEETS	10
4.1	Location and Posting	10
5.0	SPECIFIC PROCEDURES FOR KNOWN SITE HAZARDS	10
5.1	Snake Bite Procedures [Remove if this does not apply]	10
5.2	Bear Encounters [Remove if this does not apply]	11
6.0	PROJECT EMERGENCY SERVICES	13
6.1	Emergency Services for [Project Name]	13
7.0	RESCUE OPERATIONS [REMOVE IF THIS SECTION DOES NOT APPLY]	14
7.1	Rescue at Height	14
8.0	APPENDICES [edit, delete, add appendices as necessary]	15
Арр	endix 1 - Project Site Contacts	16
Арр	endix 2 - First Aid Qualified Personnel	17
Арр	endix 3 - Rescue at Height Trained Personnel	18
Арр	endix 4 - Concise Emergency Response Plan	19
Арр	endix 5 - Radio Communications for Severe Weather & Lightning Alert Flier	21
Арр	endix 6 - Site Map	23
Арр	endix 7 - Occupational Health Clinic Map and Directions	24
Арр	endix 8 - Emergency Hospital Map and Directions	25
App	endix 9 - Tornado Shelter Map and Directions	26

BALL HILL WIND PROJECT		
TITLE:	DOC No:	REV No: 01
Emergency Response Plan	PAGE: 3 of 25	DATE: 10/18/16

# 1.0 INTRODUCTION

RES Americas Construction Inc. (RES) are constructing a 100MW Wind Project, for [Client TBD], which is located Chautauqua County, New York.

RES has developed this Emergency Response Plan for use during the construction phase of the project.

# 2.0 PROJECT DESCRIPTION

The works will comprise the erection/installation of 29 Vestas V126-3.45MW Turbines, the construction of associated foundations, access tracks and electrical infrastructure and the applicable grid connection.

# 3.0 PROCEDURE

# 3.1 Safety Related Incident/Emergency Notification Procedure

- 3.1.1 Asses the emergency
- 3.1.2 Notify emergency services and site safety
  - a) If there is a potentially **LIFE THREATENING** injury or scenario, the first step is to call 911 directly.
  - b) Then contact the RES Safety Supervisor and Subcontractor/Owner Safety Representative by radio or cell phone depending on available services at site.
  - c) If the injury or scenario is not life threatening, contact the nearest Supervisor, as well as the RES Safety Supervisor and Subcontractor/Owner Safety Representative by radio or cell phone depending on available services at site.
- 3.1.3 Describe the emergency scenario. Typically the categories below can be used:
  - a) Incident type (e.g. fall, crush, vehicular accident, fire, electrical shock)
  - b) Potential fatality
  - c) Major illness (e.g., heart attack, not breathing, unconsciousness)
  - d) Major injury (e.g., broken bone, loss of limb, severe cuts/bleeding)
  - e) Minor injury (e.g., twisted ankle, foreign body in eyes, minor cuts)
  - f) Bite/sting (e.g., snake, scorpion, wasp)
  - g) Weather effect (e.g., heat or cold stress, lightning strike)

BALL HILL WIND PROJECT		
TITLE:	DOC No:	REV No: 01
Emergency Response Plan	PAGE: 4 of 25	DATE: 10/18/16

# 3.1.4 Identify location

a) Provide the location of the emergency, by referring to the nearest structure or road junction.

# 3.1.5 Determine appropriate response

- a) Unless the injury is a **LIFE THREATENING** injury, the Supervisor, RES Safety Supervisor, and Subcontractor/Owner Safety Representative will determine the appropriate response, which may be:
  - (1) Arrange for a site First Aid Trained Employee to respond to the location of the injured.
  - (2) Arrange for transport of the injured to the site safety trailer for first aid administration, and further evaluation.
  - (3) Arrange for site transport to take the injured to a hospital or local medical clinic.
  - (4) Arrange for 911 services to respond directly to the injured employee.

# 3.1.6 Coordinate

- Send an employee to the nearest site access point to meet the emergency responders and escort them to the location of the emergency.
- b) If offsite 911 responders are notified, the RES Safety Supervisor and Subcontractor/Owner Safety Representative will coordinate in directing the emergency services to the scene of the incident.

# 3.1.7 Accompany

- a) The First Aid Trained Employee, Supervisor, RES Safety Supervisor, and Subcontractor/Owner Safety Representative will continue to assist with the emergency scenario.
- b) If the decision is made to transport the employee directly to an offsite hospital or medical clinic (either by site transport or by 911 emergency responders), the employees' Supervisor, the RES Safety Supervisor (or designee), and the Subcontractor/Owner Safety Representative shall:
  - (1) Accompany the injured employee to the hospital.
  - (2) Stay with the injured employee until examination (including a drug and alcohol test) is complete, and the diagnosis is completed (so that a full report including the extent of the potential injuries can be made).

BALL HILL WIND PROJECT		
TITLE:	DOC No:	REV No: 01
Emergency Response Plan	PAGE: 5 of 25	DATE: 10/18/16

(3) Supervisors shall make known to the treating medical practitioners the employee's typical work duties, the availability of oversight for the employee's return to duty, and alternate duties available to the employee.

# 3.1.8 Notify Employer

- a) The employee's Supervisor shall notify the employee's employer and emergency contact.
- b) RES Safety shall notify RES Corporate HSQE and the RES Project Manager within established time frames.
- c) Subcontractor/Owner Safety Representative shall notify the Owner within established time frames.

# 3.2 Designated Medical Facility

3.2.1 RES has designated Gowanda Urgent Care & Medical Center for nonemergency, occupational health related injuries and illnesses.

Gowanda Urgent Care & Medical Center 34 Commercial Street Gowanda, NY 14070 8am - 8pm 716-532-8100

3.2.2 If the clinic is not available when needed during early, late, or weekend work hours, the hospital identified below will be utilized:

Bertrand Chaffee Hospital 224 E Main St Springville, NY 14141 (716) 592-2871

- 3.2.3 The Occupational Medicine facility shall be asked to consult on all injuries and illnesses with regard to determining the fitness of the individual with regard to a return to work. RES HSQE management will determine if any restrictions recommended by medical staff affects one or more of the employee's routine job functions.
- 3.2.4 The treating physician's diagnosis shall be the basis for initiating claims, unless the contractor has alternative arrangements for assessment of fitness for duty.
- 3.2.5 RES subcontractors shall log any alternate arrangements for medical treatment facilities with RES. This procedure is in the interests of both the employee (as it ensures they get the best treatment) and the employer (as

BALL HILL WIND PROJECT		
TITLE:	DOC No:	REV No: 01
Emergency Response Plan	PAGE: 6 of 25	DATE: 10/18/16

they know that their employees are seen by a competent physician).

# 3.3 Damage Incident (No Injury)

# 3.3.1 NOTIFY SUPERVISOR

a) Contact the nearest Supervisor or RES employee, preferably the RES Safety Supervisor, by radio or cell phone depending on the services available at the site.

# 3.3.2 DESCRIBE

- a) The nature of the damage.
- b) The location of the damage incident, by referring to the nearest structure or road junction.

# 3.3.3 STOP WORK

- a) Stop all work in an area of damage until RES Safety Supervisor arrives to investigate incident. Equipment and vehicle operators should stay in the vicinity of the vehicle.
- b) Any employee involved in an equipment or vehicle accident resulting in injury or damage to equipment/property shall submit to an immediate alcohol/drug test. Testing shall be coordinated by the RES Safety Supervisor.

# 3.4 Spill Response Procedure

- 3.4.1 Immediately report any releases of hazardous materials to your Supervisor and the RES Environmental Supervisor [TBD Enter name and phone number].
- 3.4.2 The site Spill Prevention, Control, and Countermeasure (SPCC) plan shall be followed when a spill occurs on site that involves any oil products. Specific guidance for reporting the spill is contained in the SPCC plan.

# 3.4.3 In case of Spill to **Land**:

- a) Stop all work in vicinity of spill.
- b) Identify the product check container design, warning labels, markings, etc.
- c) Prevent personnel from approaching the site and keep them at a distance sufficiently removed that they will not be injured by, or cause, a fire or explosion.

BALL HILL WIND PROJECT		
TITLE:	DOC No:	REV No: 01
Emergency Response Plan	PAGE: 7 of 25	DATE: 10/18/16

- d) Install measures to contain the spill if it is safe to do so utilizing a spill kit as appropriate.
  - (1) A spill kit shall include: Poly containment pail, oil absorbent pads, oil absorbent socks, heavy duty disposal bags, nitrile gloves, all-purpose absorbent (such as sawdust or kitty litter), shovels, plugs and clamps (zip ties) to control a line break.
- e) Wait for further instructions from responding personnel.
- 3.4.4 In case of Spill to Water:
  - a) Stop all work in vicinity of spill.
  - b) Identify the product check container design, warning labels, markings, etc.
  - c) Prevent personnel from approaching the site and keep them at a distance sufficiently removed that they will not be injured by, or cause, a fire or explosion.
  - d) Install measures to contain the spill if it is safe to do so.
  - e) Wait for further instructions from responding personnel.

#### 3.5 Site Evacuation Procedure

- 3.5.1 Site-wide evacuations can be ordered by:
  - a) The RES Project Manager, who may instruct ALL personnel to evacuate.
  - b) The Owner, who may instruct ALL personnel to evacuate.
  - c) The Supervisors of individual contractors, who may instruct their own people to evacuate.
- 3.5.2 Evacuation of local work areas can be ordered by the Supervisor of the work, following notification to RES Safety consistent with the reporting process above.
- 3.5.3 Notification of a site-wide evacuation shall be by radio communication.
- 3.5.4 When instructed to evacuate, all employees shall proceed in an orderly manner to the Muster Point.
  - [TBD Insert specific process for site here. Identify primary and/or secondary Muster Points].
- 3.5.5 Once at the Muster Point, check in with your supervisor immediately. The RES site manager (or designee) will arrange a head count of all personnel.

BALL HILL WIND PROJECT		
TITLE:	DOC No:	REV No: 01
Emergency Response Plan	PAGE: 8 of 25	DATE: 10/18/16

This will be done by the supervisors from each contractor caring out their own head count, and advising RES of the result.

3.5.6 Although it is not commonly needed during construction, employees that remain after an evacuation to shut down or maintain critical operations shall perform the necessary operations and evacuate as soon as possible. For instances where critical operations are being undertaken, a separate Emergency Response and Evacuation procedure shall be created and followed for these employees.

# 3.6 Fire Prevention Procedures

# 3.6.1 Notification

- a) All fires shall be immediately reported to the task Supervisor and the RES Safety Supervisor consistent with reporting process above.
- b) The RES Safety Supervisor shall coordinate the emergency response for the fire.

# 3.6.2 Specific Construction Site Fire Hazards

- a) Possible fire hazards and threats include grass fires due to lightning, failure of overhead lines, and construction-related accidents such as sparks from cutting operations and vehicular operation over dry vegetated areas.
- b) [TBD All fire hazards know to the project SHALL be listed. If any changes to construction fire hazards occur, this plan SHALL be amended to include them. In addition to listing the possible or know fire hazards at the site, detail shall be given for proper handling of the hazard, potential ignition sources and their control measures, and the type of fire protection equipment necessary to control each of the hazards listed.]

# 3.6.3 Minimizing Fire Risk during Construction

In order to <u>minimize</u> fire risk, the following procedures will be implemented:

- a) Personnel Training All site personnel shall be made aware of the dangers associated with fires and how to respond in case of a fire.
- b) No open fires No exceptions.
- c) Hot Work shall be conducted following issuance of a Hot Work Permit, conducted in accordance with approved procedures, and within de-vegetated areas only.

BALL HILL WIND PROJECT		
TITLE:	DOC No:	REV No: 01
Emergency Response Plan	PAGE: 9 of 25	DATE: 10/18/16

- d) Storage and use of flammable and combustible materials will be in accordance with RASWP 021 Fire Prevention.
- e) Fire-breaks shall be a design feature:
  - (1) Each road will be considered a site fire break. The road shoulders shall (most likely) be returned to grassland on completion of the project.
  - (2) Each turbine location shall have an area of approximately 125 feet by 150 feet to allow the assembly of rotors and erection of the turbine without the need for vehicles to travel off-road. This area will be rolled flat with the majority of significant vegetation removed.
  - (3) Each turbine and transformer shall be left with a minimum 5-foot wide gravel path surrounding them.

# 3.6.4 Suppression of Fires during Construction

In order to suppress fires, the following measures will be implemented:

- a) Employees should attempt to extinguish a fire if possible, but never at risk to their personal safety or the safety of fellow employees.
- b) Portable Fire Extinguishers Each site vehicle shall be equipped with an ABC rated fire extinguisher.
- c) Each piece of construction equipment (yellow iron or similar) shall be equipped with, or have available during operation, an up-to-date ABC rated fire extinguisher.
- d) Any fire not immediately contained and/or suppressed shall require notification to the local fire department for support.
- e) Water availability [TBD Enter details of water availability that can be utilized in a fire emergency hydrants, an XXX gallon water truck, XXX gallon water tank on site, sources of site water.]

# 3.7 Fire Prevention and Response Equipment Maintenance and Inspections

- 3.7.1 All installed fire prevention or fire response equipment shall receive monthly inspections (with records) and regular maintenance in accordance with OSHA requirements.
- 3.7.2 All RES personnel and subcontractors carrying fire extinguishers in their vehicles are responsible for conducting a monthly inspection of the extinguishers to ensure the equipment is in good working order and ready for use in a fire emergency.

BALL HILL WIND PROJECT		
TITLE:	DOC No:	REV No: 01
Emergency Response Plan	PAGE: 10 of 25	DATE: 10/18/16

# 4.0 SAFETY DATA SHEETS

# 4.1 Location and Posting

- 4.1.1 Each subcontractor shall maintain a listing of all materials that they are using which may be flammable or hazardous to health. Therefore, refer to each subcontractor for the most comprehensive and up-to-date listing together with the Safety Data Sheets (SDSs) for each chemical.
- 4.1.2 The location of the SDSs within each subcontractor's trailer or office shall be clearly posted at the project site entrance and in the RES Safety trailer.

# 5.0 SPECIFIC PROCEDURES FOR KNOWN SITE HAZARDS

- 5.1 Snake Bite Procedures [Venomous Snakes are not expected in this area of NY, Remove this section upon confirmation if this does not apply]
  - 5.1.1 What to do if bitten by a venomous snake.
    - a) Allow the bite to bleed freely for 15-30 seconds.
    - b) Cleanse and rapidly disinfect the area with an iodine solution (if not allergic to iodine, fish, or shellfish), and remove clothing and jewelry from the body extremity where the bite occurred (pant legs, shirt sleeves, rings, etc.)
    - c) If bite is on the hand, finger, foot, or toe wrap the leg/arm rapidly with 3" to 6" of ACE or crepe bandage past the knee or elbow joint immobilizing it. Over-wrap bite marks. If possible, apply hard and direct pressure over bite using a 4" x 4" gauze pad folded in half twice to 1" x 1". Tape in place with adhesive tape. Soak gauze pad in Betadine™ solution if available and victim is not allergic to iodine, fish or shellfish.
    - d) Strap gauze pad tightly in place with adhesive tape.
    - e) Over-wrap dressing above, over, and below bite area with ACE or crepe bandage, but not too tight. Wrap ACE bandage as tight as one would for a sprain. Not too tight. Check for pulse above and below elastic wrap; if absent, the wrap is too tight. Unpin and loosen. If pulses are strong (normal), it may be too loose.
    - f) Immobilize bitten extremity use splinting if available.
    - g) If possible, try and keep bitten extremity at heart level or in a gravity-neutral position. Raising it above heart level can cause venom to travel into the body; below heart level can increase swelling.
    - h) Evacuate to nearest hospital or medical facility as soon as possible.

BALL HILL WIND PROJECT		
TITLE:	DOC No:	REV No: 01
Emergency Response Plan	PAGE: 11 of 25	DATE: 10/18/16

- i) Try to identify the snake (ONLY if safe to do so). This is the least important thing you should do. Visual identification/description usually suffices, especially in the U.S. and in regions where the local fauna is known. Local symptoms will alert doctors to whether or not the bite is venomous.
- j) Bites to face, torso, or buttocks are more of a problem. ACE or crepe bandaging cannot in these areas. A pressure dressing made of a gauze pad may help to contain venom.
- 5.1.2 What to Communicate at the Hospital.
  - Ask the staff to immediately contact their designated Poison Control Center.
  - b) Ask the hospital staff to use physician consultants available through the nationwide Poison Control Network if necessary.
- 5.1.3 What **NOT** to do if bitten by a venomous snake.
  - a) Contrary to advice given elsewhere, do not permit removal of pressure dressings or ACE bandages until you are at the treatment facility and the physician is ready and able to administer anti-venom. When the dressings are released, the venom will spread causing the usual expected problems associated with a venomous snakebite.
  - b) Do **not** eat or drink anything.
  - c) Do **not** engage in strenuous physical activity.
  - d) Do **not** apply oral/mouth suction to the bite.
  - e) Do **not** cut into or incise bite marks with a blade.
  - f) Do **not** drink any alcohol or use any medication.
  - g) Do **not** apply hot or cold packs.
  - h) Do **not** apply a narrow, constrictive tourniquet such as a belt, necktie, or cord.
  - i) Do **not** use a stun gun or electric shock of any kind.
  - j) Do **not** remove dressings/wraps until arrival at hospital and antivenom is readily available.

# 5.2 Bear Encounters

- 5.2.1 Counter Assault Bear Deterrent Spray.
  - a) Bear spray shall be kept with every work crew if working in known bear areas.

BALL HILL WIND PROJECT		
TITLE:	DOC No:	REV No: 01
Emergency Response Plan	PAGE: 12 of 25	DATE: 10/18/16

- 5.2.2 What to Do If You Encounter a Bear.
  - a) Scenario #1 Bear has not detected your presence and is more than 100 m (350 ft.) away:
    - (1) Don't announce your presence if the bear has not seen you. If possible, retreat slowly and give the bear plenty of space. If you have the opportunity, you should retreat and leave the trail to the bear. If you must continue, back off a short distance, and give the bear time to leave the area. You should also do a wide detour quietly and quickly downwind to avoid problems.
  - b) Scenario #2 Bear has detected your presence, but is more than 100 m (350 ft.) away:
    - (1) Your goal here is to act in a way that will allow the bear to identify you, but also to let the bear know that you are not a threat. Speak calmly so that it knows you are a human their eyesight is quite poor. They will often quickly give ground to you once they identify you as human. If the situation permits, back away slowly, keeping a close eye on the bear. Otherwise, you may wish to detour around the bear, but in this case, detour upwind so that the bear can get your scent. Keep talking calmly. Waving your arms may help it identify you as a human.
  - c) Scenario #3 Bear has detected you and shows signs of aggression:
    - (1) If you have followed the advice listed above, hopefully you have a bit of distance between the bear and yourself. You'll need to assess the situation. Are there cubs involved? Are there climbable trees nearby - and do you have sufficient time to climb them?
    - (2) Do Not Run. You can't outrun a bear so don't even try. Black and can outrun a human on ANY terrain, uphill or down.
    - (3) Try to retreat slowly. Back up slowly and try to put more space between you and the bear. Talk calmly so that it can identify you as human, and slowly back up. Keep your backpack on as it can provide protection if necessary. Don't make direct eye contact, but keep a close look at the bear as you back away.
    - (4) Climb a tree if available. If you have enough time, and the bear continues to move closer, take advantage of a tall tree to climb. Remember, black bears are strong climbers as well. You want to get at least 10 m (33 feet) high to reduce the chance of being pulled out of the tree. Even though some bears can come up the tree after you, the hope is that they will feel less threatened, and thus less likely to chase you up the tree.

BALL HILL WIND PROJECT		
TITLE:	DOC No:	REV No: 01
Emergency Response Plan	PAGE: 13 of 25	DATE: 10/18/16

- (5) Bears will often bluff charge before attacking. This is designed to allow enemies to back down before the bear needs to actually make contact. It evolved as a way to prevent encounters with enemies and it may provide you with an opportunity to back away.
- (6) Use your pepper spray. Pepper spray is only good at very close range (5 m or 15 ft.). Wind will reduce this effective range even farther and may blow the spray back into your face. If the bear approaches within this range, point the spray at its eyes and discharge the contents. Hopefully, this will either disorient the bear to allow you to escape, or at the very least deter it from attacking. Once you have partially discharged a canister of bear spray it should be discarded. While the spray may deter attacks, the smell of pepper can act as an attractor.
- (7) If the attack escalates and a black bear or any bear that appears to have been stalking you physically contacts you, fight back with anything that is available to you. Black bears tend to be more timid than grizzlies and fighting back may scare the bear off. In addition, if a bear is stalking you than you are in a predatory situation and fighting back is your only option. This also applies to any attack at night as these may also be considered predatory in nature.
- (8) Many attacks are defensive in nature, and playing dead may show the bear that you are not a threat. Keep your backpack on as it will provide added protection. The best position is to lie on your side in a fetal position. Bring your legs up to your chest and bury your head into your legs. Wrap your arms around your legs and hold on tight. You may also lie on your stomach, backpack on, and place your hands behind your neck to protect that vulnerable area. Do not play dead until the last moment. Staying on your feet may allow you to dodge, or divert an attack.
- (9) Once the attack has ended, remain patient. After a few minutes, try to determine if the bear is still in the area. If the bear has moved on, you should make your way towards assistance as quickly as possible.

# 6.0 PROJECT EMERGENCY SERVICES

# 6.1 Emergency Services for Ball Hill Wind Project

In case of Emergency (Fire/Police/Medical): 911

Gowanda Fire Department 230 Aldrich St

BALL HILL WIND PROJECT		
TITLE:	DOC No:	REV No: 01
Emergency Response Plan	PAGE: 14 of 25	DATE: 10/18/16

Gowanda, NY 14070 716-532-3434

Gowanda Police Department 27 E Main St, Gowanda, NY 14070 716-0532-2020

Gowanda Urgent Care & Medical Center 34 Commercial Street Gowanda, NY 14070 8am - 8pm 716-532-8100

Bertrand Chaffee Hospital 224 E Main St Springville, NY 14141 (716) 592-2871

# 7.0 RESCUE OPERATIONS

# 7.1 Rescue at Height

- 7.1.1 The WTG Erection Contractor shall provide trained and qualified staff authorized to perform Rescue at Height activities during WTG Erection. The following requirements shall be in place prior to the start of WTG Erection:
  - a) Rescue at Height activities shall be conducted in accordance with RASWP 002 Work at Height.
  - b) All Rescue at Height personnel shall be trained in the Ropeworks W110 (Safety at Height and Rescue) or equivalent.
  - c) At least two (2) members of each WTG Erection crew shall hold current Rescue at Height training certifications (completed within the last calendar year, as of the start of WTG Erection).
  - d) Staff trained in Rescue at Height shall have in their possession (at their work location, up tower, etc.) the appropriate rescue and first aid equipment at all times.
  - e) All equipment used for Rescue at Height shall have a current and documented inspection (completed within the last six (6) months, as of the start of WTG Erection).

BALL HILL WIND PROJECT		
TITLE:	DOC No:	REV No: 01
Emergency Response Plan	PAGE: 15 of 25	DATE: 10/18/16

- f) The WTG Erection Contractor shall submit a Rescue at Height Plan to RES for review and approval at least two (2) weeks prior to the start of WTG Erection. The Rescue at Height Plan shall be approved for use prior to the start of WTG Erection.
- g) At least one rescue at height drill, based on the Rescue at Height Plan, shall be completed after the start of turbine erection but before the first tower is mechanically completed.
- h) If necessary, RES will contact the local Emergency Medical Services (EMS) to support a Rescue at Height.
- 7.1.2 Rescue operations are not to be undertaken under any circumstances by someone who is not trained and authorized. Below is a list of employees and their employers who have been trained and authorized to conduct rescue at height operations:

# 8.0 APPENDICES

Appendix 1 - Site Contact List

**Appendix 2 - First Aid Qualified Personnel** 

Appendix 3 - Rescue at Height Trained Personnel

Appendix 4 - Concise Emergency Response Plan

Appendix 5 - Radio Communications for Severe Weather & Lightning Alert Flier

Appendix 6 - Site Map

**Appendix 7 - Occupational Health Clinic Map and Directions** 

**Appendix 8 - Emergency Hospital Map and Directions** 

**Appendix 9 - Tornado Shelter Map and Directions** 

# Appendix 1 - Project Site Contacts - TBD

# Date of Issue: XX/XX/XX

(To be updated as construction progresses)

## **Renewable Energy Systems**

Title	Name	Cell	
RES Site Office Project Manager Site Administrator Construction Manager Electrical Manager Civil Manager Safety Supervisor Safety Supervisor Env. Supervisor	Name Name	(xxx) xxx-xxxx (office) (xxx) xxx-xxxx	
		Client/Owner	
Title	Name	Cell	
Site Office Title Title	Name Name	(xxx) xxx-xxxx (office) (xxx) xxx-xxxx	
		Subcontractors	
Title	Name	Company	Cell
Title	Name	xxxxxxx	(xxx) xxx-xxxx

[Add additional RES, Owner, and subcontractor management as appropriate]

Name

Title

# **Appendix 2 - First Aid Qualified Personnel**

Date of Issue: XX/XX/XX

(To be updated as construction progresses)

## **RES Americas**

Title	Name	Cell	Valid Through
Project Manager Site Administrator Construction Manager Electrical Manager Civil Manager Safety Supervisor Safety Supervisor	Name Name	(xxx) xxx-xxxx (xxx) xxx-xxxx	xx/xx/xx xx/xx/xx
Env. Supervisor			

## Subcontractor

Title	Name	Cell	Valid Through
Title Title	Name Name	(xxx) xxx-xxxx (xxx) xxx-xxxx	xx/xx/xx xx/xx/xx
	Subco	ontractor	
Title	Name	Cell	Valid Through
Title Title	Name Name	(xxx) xxx-xxxx	
	Subco	ontractor	
Title	Name	Cell	Valid Through
Title Title	Name Name	(xxx) xxx-xxxx (xxx) xxx-xxxx	xx/xx/xx xx/xx/xx

# **Appendix 3 - Rescue at Height Trained Personnel**

# Date of Issue: XX/XX/XX

(To be updated as construction progresses)

## **RES Americas**

Title	Name	Cell	Valid Through			
Project Manager Site Administrator Construction Manager Electrical Manager Civil Manager Safety Supervisor Safety Supervisor Env. Supervisor	Name Name	(xxx) xxx-xxxx (xxx) xxx-xxxx	xx/xx/xx xx/xx/xx			
	Subo	contractor				
Title	Name	Cell	Valid Through			
Title Title	Name Name	(xxx) xxx-xxxx (xxx) xxx-xxxx	xx/xx/xx xx/xx/xx			
	Subo	contractor				
Title	Name	Cell	Valid Through			
Title Title	Name Name	(xxx) xxx-xxxx (xxx) xxx-xxxx	xx/xx/xx xx/xx/xx			
Subcontractor						
Title	Name	Cell	Valid Through			
Title Title	Name Name	(xxx) xxx-xxxx (xxx) xxx-xxxx	xx/xx/xx xx/xx/xx			

## **Appendix 4 - Concise Emergency Response Plan**

Ball Hill Wind Project

How to Deal With an Emergency Situation

\*\*\*\* ALWAYS KNOW YOUR LOCATION \*\*\*\* (Grid, road, compound, structure location, etc.)

With any emergency situation the best thing to do first is notify your immediate supervisor. If your supervisor is at another location on the site or is not on the project site, you must contact a RES site official immediately.

If a RES site official is not close to you and your location, you will need to contact the RES site office or a RES site manager via your cell phone or via the RES radio system. **If you are using the RES radio system:** 

- Make sure you are on Channel 2 or the designated RES talk around channel.
- Announce over the radio that you have an emergency announcement asking all other radio talk to stop immediately.
- Request that ALL site activity stop during the emergency response.
- Call out for a RES site official.
- When a RES site official answers on the radio, explain the emergency slowly and clearly.
  - Make sure the RES site official understands if the emergency is a Medical emergency, a Fire emergency, a Spill emergency, a Police emergency.
  - Make sure the RES site official understands the location of the emergency.
  - o If you have determined that 911 should be called tell the RES site official to call 911.

#### In case of INJURY or ILLNESS:

- Follow the prescribed steps described above for notifying your supervisor and/or a RES site
  official making sure you communicate your location and a brief description of the medical
  emergency.
- 2. If you determine the emergency is a 911 event, tell your supervisor or the RES site official to activate the 911 system.
- 3. If you determine the injured or ill person needs additional First Aid assistance, tell your supervisor or the RES site official you need additional First Aid assistance.
- 4. Make sure the injured or ill person is being monitored and taken care of. Remember, never move an injured or ill person more than you have to in order to protect them from further injury.
- 5. Secure the immediate job site area if possible, shutting down all equipment and work.

  Remember to inform your immediate supervisor or RES site official if you need assistance securing the job site area.
- 6. A RES site official will dispatch personnel to assist with First Aid.
- 7. A RES site official will dispatch personnel to assigned points on the public and/or private roadways to help direct emergency personnel to the emergency location.
- 8. If it appears the injured or ill person is experiencing a heart attack, a RES site official will dispatch an AED to the emergency location.
- 9. If the injured or ill person is a snake bite victim, try to identify the type of snake involved. If the snake has been killed, carefully secure the snake in a manner for transport to the hospital for identification by medical personnel.
- 10. The supervisor of the injured or ill employee should accompany the employee to the hospital. If the employee is a subcontractor's employee a RES site official will be dispatched to the hospital.

#### In case of FIRE:

- Follow the prescribed steps described above for notifying your supervisor and/or a RES site
  official making sure you communicate your location and a brief description of the fire
  emergency.
- 2. If you determine the emergency is a 911 event, tell your supervisor or the RES site official to activate the 911 system.
- 3. Immediately clear the area of all personnel and, if possible, vehicles and flammables. If you are trained in fire safety, and the fire is small, attempt to put the fire out with an extinguisher. DO NOT PUT YOURSELF AT RISK.
- 4. Await the arrival of the fire department.

#### In case of SEVERE or EXTREME WEATHER:

- 1. If a severe weather emergency occurs at your work location and you have not received an official site notification either verbally, via cell phone, or via the RES Radio System, follow the prescribed steps described above for notifying your supervisor and/or a RES site official.
- 2. If you receive an official site notification either verbally, vial cell phone, or via the RES Radio System follow the instruction associated with the notification.
- 3. In the event you are caught in an open area during a lightning strike event, get into the nearest rubber-tired vehicle or grounded trailer/structure (e.g., O&M building, site office trailer).
- 4. If you take shelter in a rubber-tired vehicle, do not use the vehicle's electronic devices such as the radio.

#### In case of SPILL to LAND or WATER:

- 1. Follow the prescribed steps described above for notifying your supervisor and/or a RES site official making sure you communicate your location and a brief description of the spill emergency.
- 2. Stop all operations.
- Identify the product.
- 4. Prevent personnel from approaching the site.
- 5. Install measures to contain the spill if it is safe to do so.
- 6. Wait for further instructions from responding personnel.

In any emergency situation, keep calm and don't panic. Give clear and direct information and directions.

#### Appendix 5 - Radio Communications for Severe Weather & Lightning Alert Flier

#### **Ball Hill Wind Project**

Items in red are information only and not to be read over radio.

#### \*\*50 Mile Weather Advisory\*\*

Attention All Site:

We are currently under a condition YELLOW. At this time preparations should be made to allow an immediate shut down of main crane and up tower operations should the lightning get within our 30 mile radius. Again we are currently under a condition YELLOW for lightning within 50 miles. Repeat 3 times over a 2 or 3 minute period when lightening is within 50 miles of site. Work will continue during an advisory. Preparations should be made to stop work if storm continues towards site.

#### \*\*30 Mile Weather Caution\*\*

Attention All Site:

We are currently under a condition **ORANGE** for lightning within 30 miles of the site. All main crane lifting and tower climbing activities must cease and personnel should immediately evacuate the towers and cranes and shall maintain a 100' clearance from the cranes/towers. All other ground operations may continue provided 100' clearance from the towers/cranes is being observed. Again we are currently under a condition **ORANGE** for lightning with 30 miles. Repeat 3 times over a 2 or 3 minute period when lightning is within 30 miles of site. All Main Crane and Tower work is to cease immediately.

#### \*\*10 Mile Weather Warning or if Thunder is Heard\*\*

**Attention All Site:** 

We are currently under a condition **RED** for lightning within 10 miles of the site. All site personnel must IMMEDIATELY cease their operations and seek shelter in any rubber tired vehicle/piece of equipment or the nearest safe building (e.g., O&M building, Substation Control Building, site office trailers). Again we are under a condition **RED** for lightning within 10 miles. Repeat 3 times over a 2 or 3 minute period when lightning is within 10 miles of site or if Thunder is heard. ALL site operations are to cease immediately and personnel should seek shelter.

#### \*\*Lightning All Clear\*\*

**Attention All Site:** 

We are currently under a condition (ORANGE or YELLOW or GREEN). No lightning has been observed within (10 or 30 or 50) miles of the site in the last 30 minutes.

10 Mile All Clear, but lightning still within 30 Miles. We are currently under a Condition ORANGE. Ground operation crews may return to work but must observe 100' clearance from towers and main cranes. Again we are currently under condition ORANGE.

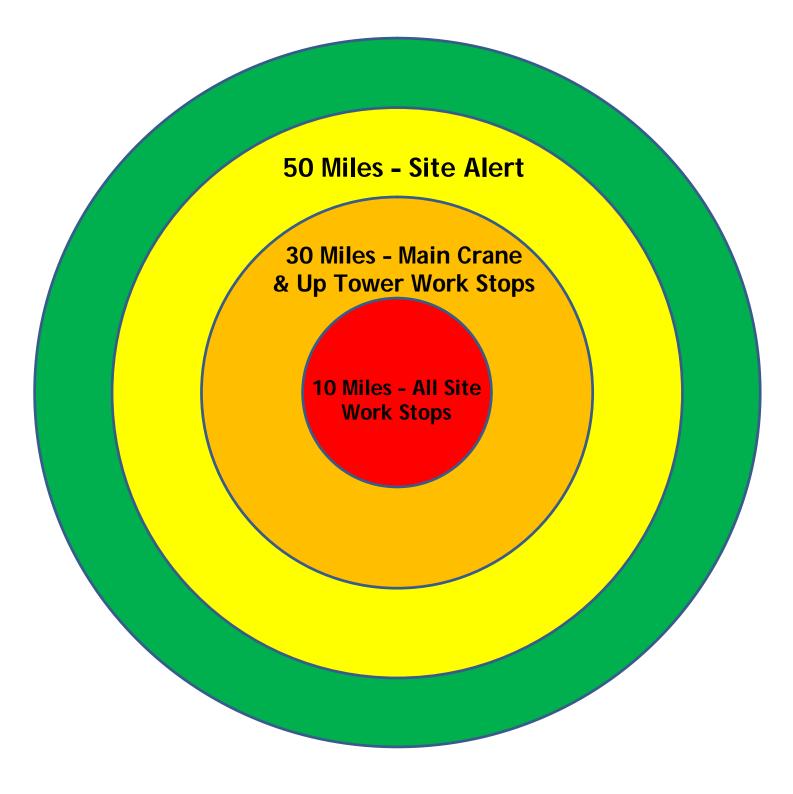
<u>30 Mile All Clear</u>, but lightning still within 50 Miles. We are currently under a condition YELLOW. All site crews may return to work but maintain awareness because lightning is still within 50 Miles of the site.

<u>50 Mile All Clear</u>, - We are currently under a condition **GREEN**. There has been no lightning within 50 miles in the last 30 minutes. All crews may return to their normal work duties.

Repeat the specific all clear announcement (10, 30, 50 mile) 3 times over a 2 or 3 minute period once the RES Project Office gets confirmation of all clear. An all clear will be announced once no strikes have been reported in the 10, 30, and 50 mile radius for 30 minutes.

\*\*\*Only the Project Manager has the authority to extend the time period before declaring an "ALL CLEAR" notice.

Lightning Alert Flier
Ball Hill Wind Project



# Appendix 6 - Site Map

Add map when available

# **Appendix 7 - Occupational Health Clinic Map and Directions**

[Insert Clinic Map and Directions when site compound address is available]

# **Appendix 8 - Emergency Hospital Map and Directions**

[Insert Hospital Map and Directions when laydown address is available.

# **Appendix 9 - Tornado Shelter Map and Directions**

[Insert Tornado Shelter Map and Directions when identified]

# P-3 Construction Quality Plan



# Construction Quality Plan – Ball Hill Wind Project

Report No: 01410R00004

Issue No:

This document ("Procedure") has been prepared by RES America Construction Inc. ("RES") in accordance with internal procedures and mandates and is Confidential Information. If this Procedure is an exhibit to a contract or agreement, then this Procedure, in the form attached to the contract, shall be subject to only those express representations or warranties regarding the exhibits to such contract, if any. Except for such representations, RES provides this Procedure "AS-IS" and does not represent, and RES expressly disclaims, that the procedures or material contained in this Procedure have been prepared pursuant to any particular methodology, are accurate or complete, or that they reflect the current status of applicable law. Portions of this Procedure may be excerpted or redacted and this Procedure is subject to revision or update at any time. Any party utilizing this Procedure, or any matter or information derived from it, ("Recipient") does so at his/her/its own risk and agrees to make his/her/its own investigation regarding his/her/its legal or other obligations for performance of his/her/its work. No Recipient shall have any right or claim against RES or any of its affiliated companies with respect to the Procedure.

# Revision History

Revision #	Date	Nature And Location Of Change		
00	12/3/14	Update of forms and format.		
01	10/25/2016	Project specific details included		

# CONTENTS

1.0	PURPOSE	2
2.0	SCOPE	2
3.0	BRIEF DESCRIPTION OF THE PROJECT	4
3.1	Project Details	4
4.0	ISSUE AND CONTROL	
4.1	Issue and Control of Construction Quality Plan	4
5.0	MANAGEMENT SYSTEM DETAILS	
5.1	RES Americas Management Systems	5
6.0	CONSTRUCTION QUALITY PLAN REFERENCES	
6.1	RES Americas Quality Manual	6
6.2	Contract Documents	6
6.3	Project Inspection and Test Plan	6
7.0	CONTRACT DOCUMENTS	
7.1	Contract	6
7.2	Construction Specifications and Drawings	6
8.0	ORGANIZATION	
8.1	Project Organizational Structure	6
8.2	Key Personnel and Responsibilities	7
8.3	Lines of Communication	15
8.4	Construction Project Directory	16
9.0	CONTROL OF QUALITY	10
9.1	Quality Procedures	16
9.2	Work Instructions	16
9.3	Contract Reviews	16
9.4	Control of Measuring and Testing Equipment	17
9.5	Nonconformance Identification and Control	17
9.6	Corrective and Preventative Measures	17
9.7	Document Control	17
9.8	Audits	17
9.9	Project Records	17

9.10	Project Completion/Turnover	18
9.11	Tests	18
9.12	Certificates	18
10.0	APPENDIXES	18
10.1	Appendix A1 - Schedule of Project Drawings	18
10.2	Appendix A2 - List of Contract Documents	18
10.3	Appendix A3 - Construction Project Directory	18
10.4	Appendix A4 - Project Reports	18
10.5	Appendix A5 - Plan of the Day Meetings (PODs)	18
10.6	Appendix A6 - Requests for Information (RFIs) and logs	18
10.7	Appendix A7 - Handover Certificates	19
10.8	Appendix A8 - Quality Procedures Relevant to the Project	19
10.9	Appendix A9 - Document Transmittals	19
10.10	Appendix A10 - Contract Certificates supplied by the Client	20
10.11	Appendix A11- Site Subcontractor's Certificates of Insurance (COI)	20
10.12	Appendix A12 - Quality Nonconforming Reports	21
10.13	Appendix B1 - Weekly Progress Reports to RES	21
10.14	Appendix B2 - Contract Review Minutes	21
10.15	Appendix B3 - Technical Enquiry Forms (TEFs)	21

#### 1.0 PURPOSE

This Construction Quality Plan describes in concise terms the specific means of implementing the RES Americas Quality Management System, as described in the RES Americas Quality Manual, in accordance with the Contract Documents, relative to the Ball Hill Wind Project.

#### 2.0 SCOPE

This Construction Quality Plan details which procedures and associated resources shall be applied, by whom and when during the Ball Hill Wind Project.

The Plan is based upon the requirements of ISO 9001:2008.

#### 3.0 BRIEF DESCRIPTION OF THE PROJECT

## 3.1 Project Details

Name of Project	Ball Hill Wind Project				
Address of Project	Chautauqua County, New York				
Client Name	TBD (currently RES development site)				
RES Project Number	23105				
Project Start Date	Summer 2017				
Projected End Date	December 2018				
Project Type	Wind Solar Transmission Other				
If Other, describe					
Generating Capacity	100 MW				

#### 4.0 ISSUE AND CONTROL

#### 4.1 Issue and Control of Construction Quality Plan

This Construction Quality Plan, prepared by the Vice President, Construction Projects (or his designee) reflects the major parameters of this Project, and has been prepared in accordance with the RES Americas Management System procedures, and the project contract between RES Americas and our Client.

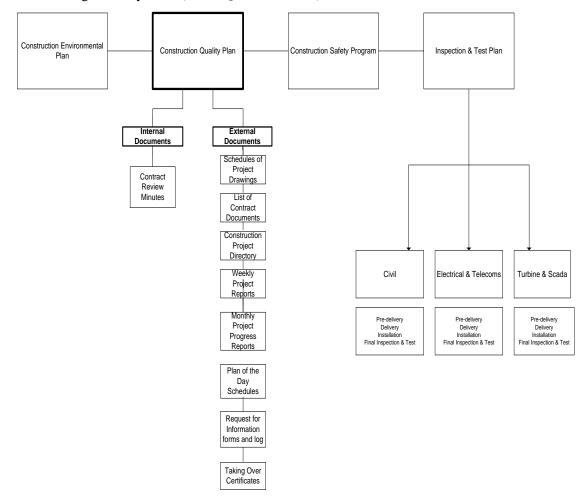
The Vice President, Construction Projects and other senior project personnel shall review this Construction Quality Plan at planned intervals throughout the life of the contract, to assure continued compliance with the contract terms and conditions.

This Construction Quality Plan is a controlled document and shall be issued in accordance with USQM 007, Control of Documents (01478-000041).

This plan shall be mirrored in structure and content on the ECM under the Project's folder location.

## 5.0 MANAGEMENT SYSTEM DETAILS

- 5.1 RES Americas Management Systems
  - 5.1.1 The diagram below portrays the typical relationship between the RES Americas Management Systems (SMS, QMS, and EMS).



- 5.1.2 The Construction Environmental Plan ensures that the project is constructed in compliance with all planning conditions; legal requirements and in accordance with the RES Americas Inc. (Company) Environmental Management System.
- 5.1.3 The Construction Safety Program File ensures that Health and Safety are managed on all construction sites, in order to prevent harm to anyone as a result of the company's activities. This plan also ensures that all statutory requirements are addressed and implemented.
- 5.1.4 The Inspection and Test Plan ensures inspections and test are performed, verified and documented according to work specifications, project drawings and contract documents.

## 6.0 CONSTRUCTION QUALITY PLAN REFERENCES

- 6.1 RES Americas Quality Manual
- 6.2 Contract Documents
- 6.3 Project Inspection and Test Plan

#### 7.0 CONTRACT DOCUMENTS

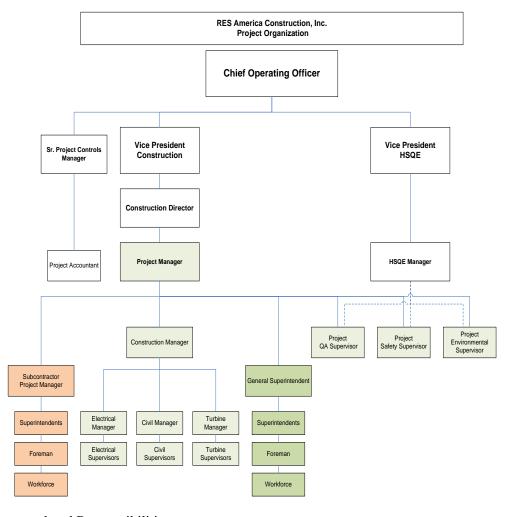
A complete set of the above shall be maintained on site by the Project Manager.

- 7.1 Contract
- 7.2 Construction Specifications and Drawings

#### 8.0 ORGANIZATION

8.1 Project Organizational Structure

The project organizational chart (for RES Americas) is as shown below:



#### 8.2 Key Personnel and Responsibilities

## 8.2.1 **Chief Operating Officer** – Andrew Fowler

The Chief Operating Officer reports to the President and CEO of RES Americas.

Responsible for assuring that the Project is completed to the requirements of the Contract.

Additional responsibilities include selecting the members of the Project Management Team.

#### 8.2.2 **Senior Vice President, Construction Projects** – Jason Zingerman

The Vice President, Construction Projects reports to the Chief Operating Officer.

The Vice President, Construction Projects shall liaise with the Vice President, HSQE as necessary to assure compliance with the RES Management Systems.

Responsibilities include:

- a) Management of the Contract to assure compliance with the Main Contract requirements and RES Americas Safety, Quality and Environmental Policies.
- b) Assisting the Chief Operating Officer in assuring that suitably experienced and qualified RES Americas personnel are assigned to the project and that they are suitably briefed, consulted and motivated to carry out their various roles in an efficient and effective manner.

- c) Assuring the implementation of the RES Safety Policy, in conjunction with the Project Safety Supervisor.
- d) Quality of the Contract works including assuring that all necessary Inspections and Tests of work are conducted and recorded as appropriate, in accordance with the Project Construction Inspection and Test Plan.
- e) Preparation of the initial construction budget and subsequent forecasts of costs to completion.
- f) Management of all designers and sub-contract consultants to assure the timely production of all designs, specifications, and drawings required for construction of the works including any necessary design of temporary works. The Vice President, Construction Projects shall assure coordination of design information requirements and assure that the receipt and issue of drawings, specifications, and other design/technical information is controlled.
- g) Monitoring of progress against the construction program and the Contract requirements and ensuring that suitable resources are applied to all activities in order to maintain the program and achieve the specified quality.
- h) Reviewing the technical capability and capacity of prospective Subcontractors and Suppliers, and assuring that they meet or exceed RES Americas standards.
- i) Commercial administration of the Main Contract and sub-contracts including control and issue of contract documents; agreeing valuations with the Client and/or Engineer so that necessary invoices can be processed, agreeing contract variations, processing Subcontractors' and Suppliers' claims for payment, and negotiation and agreement of the subcontractors' Final Accounts.
- j) Approving all contract or schedule variations and scope change orders.

#### 8.2.3 **Construction Director** – Chris Fox

The Construction Director reports to the Vice President, Construction Projects. Responsibilities include:

- a) Assisting the Vice President, Construction Projects in assuring that suitably experienced and qualified RES Americas personnel are assigned to the project and that they are suitably briefed, consulted and motivated to carry out their various roles in an efficient and effective manner.
- b) Assuring that the Project Manager maintains and complies with this Construction Quality Plan.
- c) Assuring the implementation of the RES Americas Safety Policy, in conjunction with the Project Manager, the HSQE Manager, and the projects Safety Supervisor.
- d) The quality of the Contract works including ensuring that all necessary Inspections and tests of work are conducted and recorded by the Project Manager or QA/QC personnel as appropriate, in accordance with the Project Construction Inspection and Test Plan.
- e) Assisting the Vice President, Construction Projects with the preparation of the initial construction budget and subsequent forecasts of costs to completion.
- f) Assisting with management of all designers and sub-contract consultants to ensure the timely production of all designs, specifications and drawings required for construction of the works including any necessary design of temporary works. The Construction Director and the Project Manager shall assure coordination of design

- information requirements and assure that the receipt and issue of drawings, specifications and other design/technical information is controlled.
- g) Monitoring of progress against the construction program and the Contract requirements and ensuring that suitable resources are applied to all activities in order to maintain the program and achieve the specified quality.
- h) Reviewing the technical capability and capacity of prospective Subcontractors and Suppliers, and assuring that they meet or exceed RES Americas standards.
- Assuring that necessary insurance is in place for construction of the works and that the Project Manager receives suitable evidence of insurances from the Subcontractors.
- j) Assisting the Vice President, Construction Projects with commercial administration of the Main Contract and subcontracts including control and issue of contract documents; agreeing valuations with the Client and/or Engineer so that necessary invoices can be processed, agreeing contract variations, processing Subcontractors' and Suppliers' claims for payment, and negotiation and agreement of the subcontractors' Final Accounts.
- k) Issuing instructions to Subcontractors when required.
- 1) Assisting the Vice President, Construction Projects with review of all contract or schedule variations and scope change orders.

## 8.2.4 **Senior Vice President, HSQE** – Steve Reutcke

The Vice President, HSQE reports to the Chief Operating Officer.

He is responsible for administering the RES Americas Management Systems (Safety, Quality, and Environmental) used on the Project; and for providing guidance and assistance to the Project management team.

He shall assure that system audits are regularly undertaken on the Project to assure that project personnel comply with established procedures and, as necessary will direct the implementation of corrective actions for RES Americas Management Systems.

## 8.2.5 Manager, HSQE – Shared between SMS, QMS, and EMS Managers

The Managers of HSQE reports to the Vice President, HSQE.

Shall liaise with the Construction Director and Project Manager as necessary to assure appropriate application of, and compliance with the RES Americas Management Systems. Responsibilities include:

- a) Providing programmatic and administrative management and guidance and support to the project Safety Supervisor, Environmental Supervisor and QA Supervisor for the application and management of the RES Americas Management Systems to the Project.
- b) Assuring that RES Americas project personnel are suitably trained and qualified for their role on the Project in accordance with RES Americas Management System requirements.
- c) Performing Management System audits of the project including the identification and verification of any necessary corrective actions to the project or management systems, and review of site generated nonconformance's,
- d) As necessary, providing or assuring the provision of training of RES Americas personnel to company procedures.

#### 8.2.6 **Project Safety Supervisor** – Steve Sloat

The Project Safety Supervisor reports functionally (for day to day functions in managing application of the RES Americas Safety Program at the project) to the Project Manager.

Reports administratively (for Safety program guidance and direction) to the Manager, HSQE (Safety).

### Responsibilities include:

- a) Management of the RES Americas Safety Program as applicable to the project (as defined by the project Safety Program).
- b) Maintaining required safety records and compiling the safety information detailed in the Safety Program.
- c) Providing and assuring that all site personnel and visitors receive a Site Safety Induction.
- d) Briefing and issuing copies of the Project Safety Program File and RES Safety Requirements for Subcontractors to sub contractor safety representatives.
- e) Performing daily safety inspections of site works, including taking appropriate action where deficiencies are identified.
- f) Chairing the weekly Site Safety Meetings including maintaining meeting minutes and assuring that all actions issued are recorded as closed.
- g) Maintaining the project Safety Log
- h) Taking the lead to investigate any safety incidents including managing as necessary any corrective actions, and verifying that appropriate actions are implemented to prevent repetition.
- i) Maintaining the project OSHA 300 Log and keeping copies of completed 301 forms.
- j) Notification of any serious safety incidents involving worker injury in accordance with Contract and RES Americas Safety Program requirements.
- k) Assuring that initial details of any safety incident are documented and circulated to appropriate RES Americas and OGE representatives within 24 hours of the incidents occurrence.
- 1) Maintaining access to controlled copies of the RES Americas Safety Management System for the Project.
- m) Enforcing the Site Safety Rules.
- n) Assuring that a system of permits to work is used to control work, to include use of task Job Safety Analyses (JSA).
- o) Supervision of any additional Safety Supervisors that may be assigned to the Project.

#### 8.2.7 **Project Environmental Supervisor** – Al Jensen

The Project Environmental Supervisor reports functionally (for day to day functions in managing application of the RES Americas Environmental Program at the project) to the Project Manager.

They report administratively (for Environmental program guidance and direction) to the Manager, HSQE (Environmental).

#### Responsibilities include:

a) Enforcing the Construction Environmental Plan.

- b) Performing daily and scheduled environmental inspections of site works, including taking appropriate action where deficiencies are identified
- c) Assuring that all environmental incidents are logged and that appropriate action is taken to prevent repetition.
- d) Maintaining the project Environmental Log
- e) Taking the lead to investigate any significant environmental incidents including managing as necessary any corrective actions, and verifying that appropriate actions are implemented to prevent repetition.

#### 8.2.8 **Project QA Supervisor** – Cherie Mecca

The Project QA Supervisor reports functionally (for day to day functions in managing application of the RES Americas Quality Program at the project) to the Project Manager.

They report administratively (for Quality program guidance and direction) to the Manager, HSQE (Quality)

Responsibilities include:

- a) Oversight of project inspections and documentation to verify compliance with quality program and contract requirements.
- b) As directed inspection of completed works with strict utilization of RES Americas and project inspection forms to assure compliance with this Construction Quality Plan and the Project Construction Inspection and Test Plan (I&T Plan).
- c) Identifying and documenting nonconforming inspections and noticing these to the Construction Manager, Discipline Managers, and the Project Manager.
- d) Maintaining a log of nonconforming items and the corrective actions implemented, including verification of completed corrective actions.
- e) Liaise with the Manager, HSQE (Quality) as necessary to assure that quality issues affecting the Project are addressed.
- f) Audit of project documentation and job books assembly for accuracy and completeness.
- g) Conduct random audits to verify compliance to quality program and contract requirements.

#### 8.2.9 **Project Manager** – John Bruce

The Project Manager reports to the Construction Director.

Shall liaise with the Manager, HSQE, and the project Safety Supervisor as necessary to assure appropriate application of, and compliance with the RES Americas Management Systems.

Responsibilities include:

- a) Management and supervision of all on-site activity by RES Americas and its Subcontractors to assure compliance with the Contract requirements and RES Americas Management Systems.
- b) Implementation and management to this Construction Quality Plan.
- c) Implementing all measures necessary to assure site safety in accordance with RES Americas Safety Program including:
  - (1) Assuring all that all project personnel receive a safety induction (induction to be performed by the Project Safety Supervisor).

- (2) Production of the project Risk Assessment.
- (3) Application of RES Americas Procedures and Work Instructions to the project works, including as necessary, the development and approval of project specific procedures, work instructions, or method statements.
- (4) Review of subcontractor Risk Assessments and Method Statements/procedures (in conjunction Construction Director and the project Safety Supervisor).
- (5) Assuring that Site Rules are established and observed.
- (6) Participation in weekly safety meetings.
- (7) Assuring that First Aid facilities are available.
- d) The quality of all site works assuring all necessary Inspections and Tests are conducted and recorded, and that Quality Records are maintained
- e) Assuring that a system of permits to work is used to control work, to include use of task Job Safety Analyses (JSA).
- f) Liaison with the Designer to ensure that works at site are implemented to the Designer's satisfaction. The Project Manager shall advise the Designer of any nonconformance in the works or departures from the design required by the site conditions and (in conjunction with the Construction Director) agree any necessary design modifications.
- g) Monitoring of progress at site including preparation and maintenance of the construction program, the preparation of weekly progress reports to the Vice President, Construction Projects, and producing monthly valuations.
- h) Assisting (as requested) in the selection of Subcontractors and Suppliers including issuing review of Bids and attending meetings with Bidders.
- i) Assuring receipt on site of copies of necessary evidence of Subcontractors' Insurance's, Tax Exemption Certificates and State Contractor Licenses and reviewing them for adequacy and period of validity.
- j) Site management and administration of the various subcontracts including chairing regular site progress meetings, issuing instructions to Subcontractors and Suppliers and evaluating Subcontractors' claims for payment.
- k) Managing assembly and review of Job Book and other deliverable documentation, including review and concurrence of as-built drawings.

#### 8.2.10 Construction Manager or Assistant Project Manager – TBD

The Construction Manager reports to the Project Manager, and is responsible for:

- a) Management and supervision of all on-site activity by RES Americas and its Subcontractors to assure compliance with the Contract requirements and RES Americas Management Systems.
- b) Implementation and management to this Construction Quality Plan.
- c) Implementing all measures necessary to assure site safety in accordance with RES Americas Safety Program including:
  - (1) Assuring all that all project personnel receive a safety induction (induction to be performed by the Project Safety Supervisor).

- (2) Application of RES Americas Procedures and Work Instructions to the project works, including as necessary, the development and approval of project specific procedures, work instructions, or method statements.
- (3) Assuring that Site Rules are observed.
- (4) Participation in weekly safety meetings.
- d) The quality of all site works assuring all necessary Inspections and Tests are conducted and recorded, and that Quality Records are maintained
- e) Assuring that a system of permits to work is used to control work, to include use of task Job Safety Analyses (JSA).
- f) Monitoring of progress at site including maintenance of the construction program, the preparation of weekly progress reports to the Project Manager, and assisting the Project manager with producing monthly valuations.
- g) Assisting (as requested) in the selection of Subcontractors and Suppliers including issuing review of Bids and attending meetings with Bidders.
- h) Assuring receipt on site of copies of necessary evidence of Subcontractors' Insurance's, Tax Exemption Certificates and State Contractor Licenses and reviewing them for adequacy and period of validity.
- Supporting the Project Manager with Site management and administration of the various subcontracts including participating in regular site progress meetings, issuing instructions (as directed by the Project Manager) to Subcontractors and Suppliers, and evaluating Subcontractors' claims for payment.
- j) Managing assembly and review of Job Book and other deliverable documentation, including review and concurrence of as-built drawings.

#### 8.2.11 Project Electrical Manager – TBD

The Project Electrical Manager reports to the Project Manager and is responsible for:

- a) Reviewing Subcontractor work method statements and JSA's (Job Safety Analysis) in consultation with the project Safety Supervisor, and daily agreeing subcontractor safe work practices before allowing subcontractor work to proceed.
- b) Maintaining a clear understanding of the technical work scope of each electrical subcontractor on the project, and the terms and conditions of the electrical subcontracts.
- c) Managing RES Americas Electrical Supervisors and Inspectors in the performance of their duties, including coordinating oversight and inspection functions, and the preparation of inspection records by RES Supervisors and Inspectors.
- d) Performing review of all RES Americas electrical works inspection records for accuracy and completeness.
- e) As directed, assuring appropriate notifications (specific to electrical issues e.g. main contract, PPA, Connection Agreement and Operational Agreement) are prepared and issued.
- f) Initial screening, assessment, and processing of RFI's, technical queries, and/or scope change proposals from electrical Subcontractors.
- g) Liaising with RES Americas or other design/engineering firms on electrical construction matters, in coordination with the Construction Manager or Project Manager.

- h) Assuring the timely production of electrical contract deliverables such as electrical As Built Drawings, equipment or substation operation and maintenance manuals, and facility training.
- i) Liaising with utilities and regulatory authorities to coordinate the installation, commissioning, witness testing, and handing-over of connection facilities in accordance with the contract.

## 8.2.12 Project Civil Manager – TBD

The Project Civil Manager reports to the Project Manager and is responsible for:

- a) Reviewing civil Subcontractor work method statements and JSA's (Job Safety Analysis) in consultation with the project Safety Supervisor, and daily agreeing subcontractor safe work practices before allowing subcontractor work to proceed.
- b) Maintaining a clear understanding of the technical work scope of each civil subcontractor on the project, and the terms and conditions of the civil works subcontracts.
- c) Managing RES Americas Civil Supervisors and Inspectors in the performance of their duties, including coordinating oversight and inspection functions, and the preparation of inspection records by RES Supervisors and Inspectors.
- d) Performing review of all RES Americas civil works inspection records for accuracy and completeness.
- e) As directed, assuring appropriate notifications (specific to civil issues) are prepared and issued.
- f) Initial screening, assessment, and processing of RFI's, technical queries, and/or scope change proposals from civil Subcontractors.
- g) Liaising with RES Americas or other design/engineering firms on civil construction matters, in coordination with the Construction Manager or Project Manager.
- h) Assuring the timely production of civil contract deliverables such as civil As Built Drawings.

#### 8.2.13 **Project Turbine Manager** – Bob Atterberry

The Project Turbine Manager reports to the Project Manager and is responsible for:

- a) Reviewing turbine works Subcontractor work method statements and JSA's (Job Safety Analysis) in consultation with the project Safety Supervisor, and daily agreeing subcontractor safe work practices before allowing subcontractor work to proceed.
- b) Maintaining a clear understanding of the technical work scope of the turbine works subcontractor(s) on the project, and the terms and conditions of all subcontracts related to turbine supply, delivery, erection, mechanical completion, and commissioning, and including any support services such as offloading or bolting and tensioning.
- c) Managing RES Americas turbine works Supervisors and Inspectors in the performance of their duties, including coordinating oversight and inspection functions, and the preparation of inspection records by RES Supervisors and Inspectors.
- d) Performing review of all RES Americas inspection records for accuracy and completeness.

- e) As directed, assuring appropriate notifications specific to turbine issues are prepared and issued.
- f) Initial screening, assessment, and processing of RFI's, technical queries, and/or scope change proposals from turbine works subcontractors.
- g) Liaising with the RES Americas Mechanical Engineering Manager or turbine manufactures representatives on technical matters related to the installation or operation of the turbine, in coordination with the Construction Manager or Project Manager.
- h) Assuring the timely production of contract deliverables such as Mechanical Completion Certificates, and to the extent possible Turbine Commissioning Certificates.

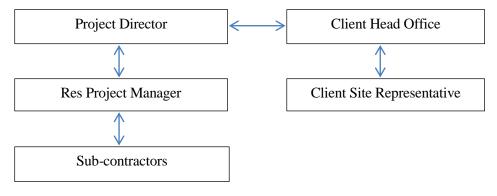
#### 8.2.14 General Superintendent – *TBD*

The General Superintendent will report directly to the Project Manager and be responsible for:

- a) Management and supervision of all day-to-day project work activities.
- b) The preparation of construction work method statements, and associated JSA's for each task performed by site workers.
- c) Assuring that all site workers are suitably trained, and possess the requisite skills for their assigned tasks.
- d) Assuring that all site workers have the appropriate tools for their assigned task.
- e) Assuring that all required equipment is available, and appropriately serviced and maintained for the intended site work.
- f) Assuring that all necessary parts needed for the assigned tasks are available and in sufficient quantity.
- g) Monitoring of progress at site including preparation and maintenance of the construction program, and preparation of weekly progress reports to the Transmission Construction Manager.
- h) Monitoring and adherence to this Construction Quality Plan and approved specification and construction drawings.
- i) Assuring the preparation and assembly of required Quality documents and records.
- j) Maintaining redline drawings, and assuring the timely production of As Built Drawings.

#### 8.3 Lines of Communication

8.3.1 The Chart below depicts the lines of communication between RES and the Client for the management of the Project.



#### 8.4 Construction Project Directory

8.4.1 A Project Directory or "Site Contact List" will be created from Template <u>CO02-011660</u>, and will be maintained and circulated by the Project Manager (or Administrative designee).

## 9.0 CONTROL OF QUALITY

#### 9.1 Quality Procedures

- 9.1.1 RES Americas Quality Procedures detail how the overall planning and administration of the quality system activities are managed.
- 9.1.2 Lists of Quality Procedures that are applicable to the Project are filed in Appendix A8.

#### 9.2 Work Instructions

- 9.2.1 Work instructions detail how a specific task is carried out. Work Instructions are also known as Method Statements.
- 9.2.2 RES Americas shall perform work in accordance with existing RES Americas Work Instructions (see Appendix A8).
- 9.2.3 RES Americas may also produce as necessary project specific Work Instructions using the Template for Writing Work Instructions (01478-00098). These shall be reviewed, approved, and issued in accordance with RES Americas procedures.
- 9.2.4 Subcontractors shall be required to provide Work Instructions sufficient to control their work. Copies of all Sub-Contractor Work Instructions shall be supplied to the RES Americas Project Manager for review and approval before any work is undertaken.
- 9.2.5 The Project Manager (or designee) assisted by the Project Safety Supervisor shall review and authorize, in writing, all work instructions/method statements supplied by Subcontractors.
- 9.2.6 A copy of all Subcontractor Letters of Authorization shall be retained by RES Americas.
- 9.2.7 A file containing copies of all Work Instructions supplied to RES Americas by Subcontractors, or task or site specific procedures produced by RES Americas shall be maintained on site.

#### 9.3 Contract Reviews

- 9.3.1 In order to assure that contract and customer expectations are being met Contract Review Meetings (Initial and Final) shall be held as detailed in RES Americas procedure USQM 006, Contract Review (01478-000046).
- 9.3.2 Contract kickoff meetings shall also be held with each subcontractor utilizing the same process.

- 9.4 Control of Measuring and Testing Equipment
  - 9.4.1 Measuring and test equipment shall be controlled in order to ensure that equipment conforms to specified requirements.
  - 9.4.2 All such equipment shall be uniquely numbered.
  - 9.4.3 Calibration of Measuring and Testing equipment shall be in controlled in accordance with USQM-015, Calibration of Measuring and Test Equipment (01478-000045).
  - 9.4.4 Subcontractors shall be held to similar controls as those or RES Americas.
- 9.5 Nonconformance Identification and Control
  - 9.5.1 Materials or product (components, units, parts etc.) identified as nonconforming at any stage shall be controlled in accordance with RES Americas procedure USQM-011, Corrective and Preventive Action and Control of Non-conformance Procedure (01478-000043).
- 9.6 Corrective and Preventative Measures
  - 9.6.1 USQM-001, Corrective and Preventive Action and Control of Non-conformance Procedure (01478-000043) assure tracking and control of corrective actions for nonconforming product or work.
  - 9.6.2 Corrective Actions for Safety and Environmental Program items are tracked through the respective Safety and Environmental Logs maintained by the Safety Supervisor and Environmental Supervisor, respectively.

#### 9.7 Document Control

9.7.1 Quality documentation and records providing objective evidence of activities performed, and results achieved, are controlled by application of USQM-007, Control of Documents (01478-000041).

#### 9.8 Audits

- 9.8.1 The Manager, HSQE will establish an audit schedule for the project in consultation with the VP, HSQE and the VP, Construction Projects.
- 9.8.2 Planned audits of project activities shall be undertaken by the Manager, HSQE and/or designated auditors who shall be independent of the functions being audited.
- 9.8.3 Audits shall be conducted in accordance with USQM-005, Auditing Procedure (01478-000017).

## 9.9 Project Records

- 9.9.1 Following completion of the Project, required archive records shall be filed in Job Books in accordance with Contract requirements.
- 9.9.2 The filing structure for hard copy records should mirror the record structure in the ECM.

- 9.10 Project Completion/Turnover
  - 9.10.1 The turnover of the completed Project to the Client shall be carried out in accordance with the Procedure for Handing Over Completed Projects.
  - 9.10.2 This procedure shall be tailored as required by the Projects Contract.
- 9.11 Tests
  - 9.11.1 Any tests required in accordance with the project Contract shall specified in the Construction Inspection and Test Plan (I&TP)
  - 9.11.2 The I&TP documentation is assembled as the Project develops and contains the frequency of inspections and tests as well as all inspection and test records.
- 9.12 Certificates
  - 9.12.1 The Client, or their Representative, will issue project certificates in accordance with the projects Contract.
  - 9.12.2 These shall be stored in Appendix A10

#### 10.0 APPENDIXES

- 10.1 Appendix A1 Schedule of Project Drawings
  - 10.1.1 This Appendix is designated for the management of Project Drawings. It includes a mechanism for storage and maintenance of Drawing Issue Record Sheets for Series 0 through 4 plus a place for External Drawings.
- 10.2 Appendix A2 List of Contract Documents
  - 10.2.1 This Appendix is to list (and attach if practical) the main Contract for the Project. Typically, reference is made to the contract also noting its location.
- 10.3 Appendix A3 Construction Project Directory
  - 10.3.1 The Project Directory, often referred to as the "Site Contact List," is part of the RES Admin Guide. This Appendix serves as a place for the master copy to be filed. The actual directory itself shall be created from Template <a href="CO02-011660">CO02-011660</a> (Located in the Attachments section of the Admin Guide).
- 10.4 Appendix A4 Project Reports
  - 10.4.1 Project progress reports made to the Client.
- 10.5 Appendix A5 Plan of the Day Meetings (PODs)
  - 10.5.1 POD meeting records shall be filed in this location if used. Weekly files shall be kept at the RES main office.
- 10.6 Appendix A6 Requests for Information (RFIs) and logs

10.6.1 *Request for Information (RFI)*: used between RES and the Client, Subcontractor, or other entity to request information and approval on any changes that result in changes physically or financially for the receiving party on the project (Example: asking Client if a different color is ok for the O&M building paint)

#### 10.6.2 RFI Folder Structure:

- a) Client RFIs
  - (1) Incoming Client RFI Register (document)
  - (2) Outgoing Client RFI Register (document)
  - (3) Incoming RFIs
  - (4) Outgoing RFIs
- b) Subcontractor RFIs
  - (1) Incoming Subcontractor RFI Register (document)
  - (2) Outgoing Subcontractor RFI Register (document)
  - (3) Incoming RFIs
  - (4) Outgoing RFIs
- c) Misc. RFIs
  - (1) Incoming Misc. RFI Register (document)
  - (2) Outgoing Misc. RFI Register (document)
  - (3) Incoming RFIs
  - (4) Outgoing RFIs
- 10.7 Appendix A7 Handover Certificates
  - 10.7.1 This appendix is used for storage of any Handover Certificates for the Project or any letters recording that the Client has taken over the completed Project.
- 10.8 Appendix A8 Quality Procedures Relevant to the Project
  - 10.8.1 Although it is not required to physically store each procedure in this appendix, a list is provided as reference. This list should be reviewed periodically to ensure it is up to date with the ECM.
- 10.9 Appendix A9 Document Transmittals
  - 10.9.1 *Transmittals are* used to transmit documentation (either electronic or hard copies) between RES and the Client, Subcontractor, or other entity (Example: IFC Foundation drawings to Sub)
  - 10.9.2 Transmittals Folder Structure:
    - a) Client Transmittals
      - (1) Client Transmittal Register (document)
      - (2) Incoming
      - (3) Outgoing

- b) Subcontractor Transmittals
  - (1) Subcontractor Transmittal Register (document)
  - (2) Incoming
  - (3) Outgoing
- c) Internal Transmittals
  - (1) Internal Transmittal Register (document)
  - (2) Incoming
  - (3) Outgoing
- d) Misc. Transmittals
  - (1) Misc. Transmittal Register (document)
  - (2) Incoming
  - (3) Outgoing
- 10.10 Appendix A10 Contract Certificates supplied by the Client
  - 10.10.1 All certificates or letters of confirmation provided by the Client (those other than taking over certificates, see Appendix A7) shall be filed here.
- 10.11 Appendix A11- Site Subcontractor's Certificates of Insurance (COI)
  - 10.11.1 All Subcontractors should be aware that their COI needs to be sent directly to Risk Management in our Broomfield Office.
  - 10.11.2 If a COI is received on site, it needs to be sent directly to Risk Management for processing.
  - 10.11.3 The sites should not be saving these to the ECM or updating the database.
    - a) Note: This list is in effort to ensure all Subcontractors on site have submitted and had approved their COI. This appendix is not meant to hold copies of COIs whatsoever. COIs are held exclusively by the Risk Management Department. COIs shall only be printed and entered into Project Documentation for Job Book creation at the end of a Project and only after confirmation has been received from Risk Management that all COIs are current and up to date.

- 10.12 Appendix A12 Quality Nonconforming Reports
  - 10.12.1 This Appendix will serve as a location for storage and tracking of all Quality Reports.
  - 10.12.2 A register is also required for this appendix which is based on Template: <u>01478-000644</u>.
- 10.13 Appendix B1 Weekly Progress Reports to RES
  - 10.13.1 Based on template, CO02-014344
- 10.14 Appendix B2 Contract Review Minutes
  - 10.14.1 These records shall be filed in this location.
- 10.15 Appendix B3 Technical Enquiry Forms (TEFs)
  - 10.15.1 TEFs are used between Construction sites and Engineering for approval on any and all changes to the original design or equipment on a project prior to implementation no changes can happen unless a TEF has been used and is approved by both the Construction Site and Engineering (Example: needing to move a culvert because of rock change of design)
    - a) TEF Folder Structure:
      - (1) TEF Register (document)
      - (2) TEF 001 Description (example folders for each TEF under Register)

# Appendix A1 - Schedule of Project Drawings

		MUTE, THIS IS A U	WHILE DOCUMENT AND IS	BARRET TO CHANGE WITHOUT	NUTSEE AT ANY 19	ME	_	
Biotes I	Meetatoe	196	Des	Score Chinese	Pages		Herman Dan	Approvat Out
teres P	Periodic	Pete .	Date	Securit States	Coper	- thy	Promotive.	Asserted that
Sector I	Periodo	Title .	Date	licard Briss	Papers	He .	Perime Care	- Represent Out
harar 8	Partition	- Lie	State	Second Charles	Parpore	in	Streams Care	Approved () or

# **Appendix A2 – List of Contract Documents**

This appendix is used for storage of the executed EPC or BOP (electronically only).

# Appendix A3 – Project Directory

res	AMERICAS		Wind Projec P Revi	List	
			gency Response		
	r all emergenc	ies (Ambulance, Fir	e, Police) dial <b>911</b>		RES Construction Site Office
Police Station Fire Station		address	non-emergency	phone number	O & M Building Address:
Hospital					O & M Building Address:
Environmental Spills					Laydown Yard Address:
State Troopers/Police					
Poison Control					Substation Address:
NAME	COMPANY	POSITION	OFFICE #	MOBILE #	E-MAIL
			RES Contacts		
	RES	RES Site Office	Phone Number	Fas Number	
	-	+	+	-	
		+	+	<del> </del>	
		C	lient Contacts		
		+			
		Subco	ntractor Contacts		
				-	
		Oth	er Site Contacts		
				-	



### PROJECT NAME

PROJECT REPORT

Report no:
Report month:

#### **Executive Summary**

#### This Month's Highlights

- Highlight 1
- Highlight 2
- Highlight 3

#### This Month's Key Issues

- Issue 1
- Issue 2
- Issue 3

#### Safety

Accident and incident statistics for this period and to date are:

Туре	Lost Time	Injury (Medical Aid)	Minor Injury (First Aid)	Damage	Near Miss
Current Period					
Project To Date					

TRIR = #

Total recordable Incident Rate = (Lost Time + Medical Aid) \* 200,000 / Total Man Hours

RES Safety Index = #

((Lost Time \* 64) + (Injury \* 16) + (Minor Injury \* 4) + (Damage \* 1) + (Near Miss \* -0.25)) / Man Hours \* 1000

Page 1 of 18

Safety	-::	E 1.4 -	C-f-+- D		- <b>5</b>	Full-State 4						
Week's Issues:	ription of	rweek s	затету кер	ort can b	e found in l	EXHIBIT I						
•												
•												
•												
Week's Highligh	ts:											
•												
•												
Environmenta	al											
		fweek's	Environme	ntal Rep	ort can be f	ound in Exh	nibit 2					
Туре	IV	1ajor In	cident		Minor I	Incident		Nea	r Miss			
Current Period												
Project to Date												
Week's Issues:												
•												
•												
•												
Week's Highligh	ts:											
•												
_												
•												
:												
Ouality												
Quality Full desc	ription of	fweek's	Quality Rep	port can l	be found in	Exhibit3						
*Full desc	ription of	fweek's	Quality Rep	port can l	be found in	Exhibit3						
			Quality Rep			Exhibit 3		wed McDe		Ict	and CDAD	
*Full desc Project Name:	RES Issue	d NCRs		RES Issu	ed CPARs			oued NCRs	Closed		ued CPARs	Closed
*Full desc Project Name: Type Current Period			Quality Rep Closed			Exhibit 3	Client Iss	oued NCRs Open	Closed	Client Iss	ued CPARs Open	Closed
*Full desc Project Name:	RES Issue	d NCRs		RES Issu	ed CPARs				Closed			Closed
*Full desc Project Name: Type Current Period	RES Issue Issued	d NCRs		RES Issu	ed CPARs				Closed			Closed
*Full desc  Project Name:  Type  Current Period  Project to Date  RES NCRs Issued Deta	RES Issued Issued	d NCRs		RES Issue	ed CPARs				Closed			Closed
*Full desc Project Name:  Type Current Period Project to Date	RES Issued Issued	d NCRs		RES Issue	ed CPARs				Closed			Closed
*Full desc  Project Name:  Type  Current Period  Project to Date  RES NCRs Issued Deta	RES Issued Issued	d NCRs		RES Issue	ed CPARs				Closed			Closed
*Full desc  Project Name:  Type  Current Period  Project to Date  RES NCRs Issued Deta	RES Issued Issued	d NCRs		RES Issue	ed CPARs				Closed			Closed
*Full desc  Project Name:  Type Current Period Project to Date  RES NCRs Issued Deta  RES CPARs Issued Deta	RES Issued Issued	d NCRs		RES Issue	ed CPARs				Closed			Closed
*Full desc  Project Name:  Type Current Period Project to Date  RES NCRs Issued Deta  RES CPARs Issued Deta	RES Issued Issued	d NCRs		RES Issue	ed CPARs				Closed			Closed
*Full desc  Project Name:  Type Current Period Project to Date  RES NCRs Issued Deta  RES CPARs Issued Deta	RES Issued Issued	d NCRs		RES Issue	ed CPARs				Closed			Closed
*Full desc  Project Name:  Type Current Period Project to Date  RES NCRs Issued Deta  RES CPARs Issued Deta	RES Issued Issued	d NCRs		RES Issue	ed CPARs				Closed			Closed



#### **Schedule Status**

Project duration	# weeks
No. of weeks into contract	# weeks
Contract time passed (%)	%

	Weighted	Percent Complete				
Key Activities (Construction)	%	Contract Schedule	Construction Schedule	Actual		
Design Engineering	2.5%	60.0%		50.0%		
Roads & Crane Pads	15.0%	55.0%		50.0%		
Foundations	15.0%	75.0%		50.0%		
Collection System	15.0%	40.0%		50.0%		
Overhead Line	7.5%	29.0%		50.0%		
Substation	15.0%	85.0%		50.0%		
Switchyard	10.0%	96.0%		50.0%		
O&M Building	2.5%	65.0%		50.0%		
WTG Delivery, Erection, & MCC	15.0%	25.0%		20.0%		
Completion	2.5%	15.0%		50.0%		
	Over	all Actual Perc	ent Complete	44.3%		

Page 3 of 18



# **Progress Report**

# **Construction Status**

Certificates	Total	Submitted	Signed
Foundation Completion Certificate			
Mechanical Completion Certificate			
Electrical Works Completion Certificate			
Project Mechanical Completion Certificate			
Project Substantial Completion Certificate			
Project Final Completion			

#### Comments:

- .
- •
- •

#### Roads & Crane Pads

	R	oads & Crane	Pads		
Item	Weighted %	Budget	Total Completed	Total Remaining	Percent Complete
Roads	75%		Roads		50.0%
Rough Grade	30%	10	5	5	50.0%
Sub Grade	30%	10	5	5	50.0%
1st Lift	10%	10	5	5	50.0%
2nd Lift	10%	10	5	5	50.0%
Shoulders	10%	10	5	5	50.0%
Ditches	10%	10	5	5	50.0%
Crane Pads	25%		Crane Pads		50%
Cut & Subgrade Compacted	60%	10	5	5	50.0%
Material Placed & Compacted	40%	10	5	5	50.0%
			Roads & Crane	Pads Progress	50.0%

#### Roads

\*picture\*

Highlight 1

Page 4 of 18

# $Appendix \ A4-Project \ Reports$



Highlight 2

#### Crane Pads

\*picture\*

- Highlight 1
- Highlight 2

#### Foundations

Foundations							
Item	Weighted %	Budget	Total Completed	Total Remaining	Percent Complete		
Excavations	10%	10	5	5	50.0%		
Mud Mats	5%	10	5	5	50.0%		
Bases	40%	10	5	5	50.0%		
Pedestals	20%	10	5	5	50.0%		
Transformer Pad	5%	10	5	5	50.0%		
Backfilled	15%	10	5	5	50.0%		
Ground Ring	5%	10	5	5	50.0%		
			Founda	tion Progress	50.0%		

#### \*picture\*

- Highlight 1
- Highlight 2

Page 5 of 18

# $Appendix \ A4-Project \ Reports$



#### **Collection System**

Collection System							
Item	Weighted %	Quantity	Total Received	Total Remaining	Percent Complete		
Deliveries	30.0%		Deliveries		50.0%		
Grounding Transformers	5.0%	10	5	5	50.0%		
Pad Mount Transformer	20.0%	10	5	5	50.0%		
DLO Cable	15.0%	10	5	5	50.0%		
MV Cable	40.0%	10	5	5	50.0%		
Fiber	5.0%	10	5	5	50.0%		
Ground Cable	5.0%	10	5	5	50.0%		
Junction Boxes	5.0%	10	5	5	50.0%		
Rubber Goods	5.0%	10	5	5	50.0%		
Installations	50.0%		Installations		50.0%		
Trench	50%	10	5	5	50.0%		
MV & Fiber/Ground Cable	25%	10	5	5	50.0%		
DLO Cable	10%	10	5	5	50.0%		
Grounding Transformers	296	10	5	5	50.0%		
Pad Mount Transformer	9%	10	5	5	50.0%		
Junction Boxes	496	10	5	5	50.0%		
Terminations	20.0%		Terminations		50.0%		
Grounding Transformers	25.0%	10	5	5	50.0%		
Pad Mount Transformer	25.0%	10	5	5	50.0%		
Junction Boxes	25.0%	10	5	5	50.0%		
Turbine	25.0%	10	5	5	50.0%		
			Collection Syst	em Progress:	50.0%		

#### \*picture\*

- Highlight 1
- Highlight 2

Page 6 of **18** 

# $Appendix \ A4-Project \ Reports$



#### Overhead Line

Overhead Lines								
Item	Weighted %	Budget	Total Received	Total Remaining	Percent Complete			
Poles/Conductor Delivered	20.0%	10	5	5	50.0%			
Poles Set	40.0%	10	5	5	50.0%			
Cable Pulled	30.0%	10	5	5	50.0%			
Clipped & Sagged/Terminated	10.0%	10	5	5	50.0%			
Overhead Line Progress								

<sup>\*</sup>picture\*

- Highlight 1
- Highlight 2

#### Substation

Substation							
Item	Weighted %	Budget	Total Completed	Total Remaining	Percent Complete		
Deliveries	20%		Deliveries		50.0%		
Structural Steel	15.0%	10	5	5	50.0%		
Main Transformer	30.0%	10	5	5	50.0%		
Control House	15.0%	10	5	5	50.0%		
Relay Panel	15.0%	10	5	5	50.0%		
Arrestors	5.0%	10	5	5	50.0%		
Switches	10.0%	10	5	5	50.0%		
Breakers	10.0%	10	5	5	50.0%		
Construction	80%		Construction		50%		
Grading & Drainage	15.0%	10	5	5	50.0%		
Foundations	15.0%	10	5	5	50.0%		
Underground/Grounding	10.0%	10	5	5	50.0%		
Structural Steel Work	10.0%	10	5	5	50.0%		
Equipment Installation	10.0%	10	5	5	50.0%		
Control Building/Wiring	10.0%	10	5	5	50.0%		
Transformer Fit Out	10.0%	10	5	5	50.0%		
Commission	10.0%	10	5	5	50.0%		
Fence, Gravel, & Clean Up	10.0%	10	5	5	50.0%		
			Substa	tion Progress	50.0%		

<sup>\*</sup>picture\*

Page **7** of **18** 



- Highlight 1
- Highlight 2

#### Switchyard

		Substatio	n		
Item	Weighted %	Budget	Total Completed	Total Remaining	Percent Complete
Deliveries	20%		Deliveries		50.0%
Structural Steel	20.0%	10	5	5	50.0%
Control House	20.0%	10	5	5	50.0%
Relay Panel	20.0%	10	5	5	50.0%
Arrestors	10.0%	10	5	5	50.0%
Switches	15.0%	10	5	5	50.0%
Breakers	15.0%	10	5	5	50.0%
Construction	80%		Construction		50%
Grading & Drainage	20.0%	10	5	5	50.0%
Foundations	20.0%	10	5	5	50.0%
Underground/Grounding	10.0%	10	5	5	50.0%
Structural Steel Work	10.0%	10	5	5	50.0%
Equipment Installation	10.0%	10	5	5	50.0%
Control Building/Wiring	10.0%	10	5	5	50.0%
Commission	10.0%	10	5	5	50.0%
Fence, Gravel, & Clean Up	10.0%	10	5	5	50.0%
			Substa	tion Progress	50.0%

- \*picture\*
- Highlight 1
- Highlight 2

Page 8 of 18



#### **O&M** Building

		O&M Buildi	ng		
Item	Weighted %	Budget	Total Completed	Total Remaining	Percent Complete
Design	5.0%	10	5	5	50.0%
Delivery	10.0%	10	5	5	50.0%
Building OnSite & Erected	10.0%	10	5	5	50.0%
Grading & Drainage	5.0%	10	5	5	50.0%
Foundations - Floor Slab	5.0%	10	5	5	50.0%
Steel Structure	10.0%	10	5	5	50.0%
Cladding	10.0%	10	5	5	50.0%
Internal Walls & Ceiling	10.0%	10	5	5	50.0%
Fit Out Electrical & Plumbing	15.0%	10	5	5	50.0%
Cleaning/Decorating	10.0%	10	5	5	50.0%
External Work	10.0%	10	5	5	50.0%
			O&M Buil	Iding Progress	50.0%

#### \*picture\*

- Highlight 1
- Highlight 2

Page 9 of 18



# Turbine Deliveries, Erection, and MCCs

		Turi	bines			
Item	Weig Without Commissionin g	Commissionin Commissioning		Total Received	Total Remaining	Percent Complete
Deliveries	20.0%	20.0%		Deliveries		20.0%
Base	10	.0%	10	2	8	20.0%
Mid	10	.0%	10	2	8	20.0%
Тор	10	.0%	10	2	8	20.0%
Hub	10	.0%	10	2	8	20.0%
Nacelle	35	.0%	10	2	8	20.0%
Blades	25	.0%	10	2	8	20.0%
Erection	45.0%	40.0%		Erection		20.0%
Base	10	.0%	10	2	8	20.0%
Mid	10	.0%	10	2	8	20.0%
Тор	10	.0%	10	2	8	20.0%
Nacelle	20	.0%	10	2	8	20.0%
Rotor	20	.0%	10	2	8	20.0%
Electrical Build-out	30	.0%	10	2	8	20.0%
Mechanical Completions	35.0%	30.0%	М	echanical Compl	etions	20.0%
Walk-down	50	.0%				
Submitted	25.0%		10	2	8	20.0%
Signed	25.0%		10	2	8	20.0%
Commissioning	0.0% 10.0%			Commissionin	g	
Commissioned	60	.0%			0	
Submitted	20	.0%			0	
Signed	20	.0%			0	
				Turb	ines Progress	20.0%

\*picture\*

- Highlight 1
- Highlight 2

Page 10 of 18



#### **⊕**ompletion

		Completic	n		
Item	Weighted %	Budget	Total Completed	Total Remaining	Percent Complete
Site Restoration	50.0%		Site Restoration		50.0%
Reseeding	50%	10	5	5	50.0%
Roads	50%	10	5	5	50.0%
Job Books	25.0%	10	5	5	50.0%
As- <u>Builts</u>	25.0%	10	5	5	50.0%
			Comple	tion Progress	50.0%

\*picture\*

- Highlight 1
- Highlight 2

#### Met Mast

\*picture\*

- Highlight 1
- Highlight 2

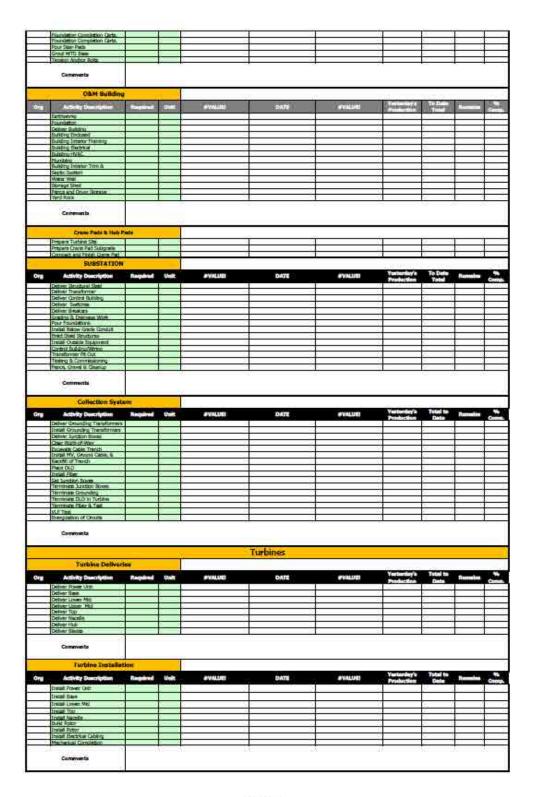
Page 11 of 18

# Appendix A5 – Plan of the Day (POD) Meetings

COC			Wind	Project		-	
(C5 *****			Plan o	f the Day			DATE
Present						5	
The state of the s		c of the		_		Worthol	
ŝ i		E OI LORE					
				3	Low	Today's forecast	
					ingir 1		
					Cond Wind		
					Charc	on of Presiptiation	
				3	Low 1	Yesterday's History	
					Fright Cond	Tempi.	
					Mixt	Wed Got	
				1.5		c. Observed (in)	
				- 3	Precas Delay Days	Wasten Dologe to Date	
				3	Wind Delay Days	9	
		Man P	ower & Man Hours			Gener	al Notes
Opportunit	Paris			1000	100		
RES Self-Partiern	1		iii) Ito	8			
IES Subcontractors			ž.			9	
	-					8	
	1	1	8				
		45	30 90			9	
			30				
						Ē	
			ģ.			8	
		10	ž.	2		Ê	
Mon - RES Managed Contractors						8	
			2	2	0 0	8	
	_		P				
			1	2		Ę.	
Total	4		updated Weekly	ķ	<u>.</u>		
ė.		* Hours		vironmental / Cultu			
tronomia							
Quite							
Cohes	_						
UIS/S	1			er. d			
770000000000000000000000000000000000000			<del></del>	Civil			
MATERIAL		_	6				
Drg Authority Description	Margar S	and the	COMMISS.	Dette	PVALUE	Telephone Prof	
Geografia - Owe 5		1			i i		- 1 - 1
Community							
NOADS	li .		i i	4	4		
Ding American Description	Cinchi	Diam'r.	PVALUE	DATE	SYNLUZ	Notice of State	The second live
Laydown Anis	-						
Top Sed Streeting & Greaters			9	Y	9 3	350	12 12
Place Aurente Pock Entranne		3	i i	1	i i	9	
Florad Compliments	in .	LT.				-	
Settoms Too Sol - Acres							T T
Food Superate Place Base Aggregate			0			5 58	
All aggregate consistent		0	(S	6 2 2 3	S 20	5 5	0 0
Interior		ir.	ľ:	li i	k i	<u> </u>	
Community			•				
FOUNDATION			14				- m - m - m
Org Activity Description	The Park	Date	#PALCET	DATE	PYALIE	Haranti Des	
Turbine Site Streeting - WTG							
Foundation theavelon Mod Met		9	Š.				+ +
Retire Dottom Met Embedment Fing/Arctor Solo						2 75 5 17	
Conduit Immend			ŭ V	2			
Protein Top Mat Foundation Base			ė .				
Pedata Rater Palata Parel		8	Ě		6		6 6
Gircolli Foundation							

Page 1 of 2

# Appendix A5 – Plan of the Day (POD) Meetings



Page 2 of 2



#### PROJET NAME WIND PROJECT

# REQUEST FOR INFORMATION

From: To:  Response Requested By: Subject:	Phone: Phone: Request/Staten	Company:  Company:	
Response Requested By:			
Security of T	Request/Staten	nent :	
Subject:	Request/Staten	nent .	
	Request/Staten	nent	
	2017		
	Response to Request/	Statement	
Response by:	Date:	Company:	
Use continuation sheets if necessar	3H32440	THE PROPERTY OF THE PARTY OF TH	

10.16 Page 1 of 1

#### **Appendix A7 – Handover Certificates**

This appendix is used for storage of any Handover Certificates for the Project or any letters recording that the Client has taken over the completed Project. There are no Handover Certificates for the project, per the Contract.

Handover is basically when the project reaches Substantial Completion. There is a certificate for this which is located under Appendix A10- Contract Certificates supplied by the Client.

# **Appendix A8 - Project Quality Procedures**

DOCUMENT	Doc No:
Quality Manual	01478-000692
USQM – 001 US Quality Policy	<u>01478-000284</u>
USQM - 002 Company Scope, Structure, Organization and Profile	<u>01478-000285</u>
USQM – 003 Authorities and Responsibilities	<u>01478-000286</u>
USQM – 005 Auditing Procedure	<u>01478-000017</u>
USQM – 006 Contract Review	<u>01478-000046</u>
USQM – 007 Document Control	<u>01478-000041</u>
USQM – 008 Preparation and Issuance of a RES Americas Procedure	<u>01478-000759</u>
USPM - 011 Corrective/Preventive Action and Control of Non-Conformance	<u>01478-000043</u>
USQM – 012 Education & Training	<u>01478R00006</u>
USQM – 013 Management Systems Communications	<u>01478-000289</u>
USQM – 014 Client Satisfaction and Performance Measurement	<u>01478-000015</u>
USQM – 015 Calibration of Measuring & Testing Equipment	<u>01478-000045</u>
USQM – 018 Management Review	<u>01478-000292</u>

# Appendix A9 – Document Transmittals



11101 West 120th Avenue Suite 400 Broomfield, CO 80021 USA

Tel: +303 439 4200 Fax: +303 439 4299

#### PROJECT NAME

	[	Transı	nittal No:		]	
From Organization Transmittal date  aclosed are the following documents and/or drawings:  Number Issue Title Copies S  Status legend  Inf — for information Rev — for comment and review	T'**	14-	0	Plantan de como	TT1	
Number Issue Title Copies S    Status legend   Sev - for comment and review   September   September	Transmitte	a to	Organization	Electronic copy	пага	cop
Number Issue Title Copies S    Status legend   Sev - for comment and review   September   September		•		•		
Number Issue Title Copies S  Status legend  Inf — for information Rev — for comment and review	From		Organization	Transm	ittal date	
Status legend  Inf — for information						
Status legend  Inf — for information	nclosed are the	following doc	uments and/or drawings	:		
Inf — for information Rsv — for comment and review	Number	Issue	Tit	le	Copies	S
Inf — for information Rsv — for comment and review						L
Inf — for information Rsv — for comment and review						$\vdash$
Inf — for information Rsv — for comment and review					1	$\vdash$
Inf – for information Rsv – for comment and review						
Inf – for information Rsv – for comment and review						_
Inf – for information Rsv – for comment and review		+ +				$\vdash$
Inf – for information Rsv – for comment and review					1	$\vdash$
Inf – for information Rsv – for comment and review						
Inf – for information Rsv – for comment and review		+				L
Inf – for information Rsv – for comment and review		+ +				$\vdash$
Inf – for information Rsv – for comment and review						Т
Inf – for information Rsv – for comment and review						
Inf – for information Rsv – for comment and review						
Inf – for information Rsv – for comment and review			Status legen	d		
Comments	Inf	– for informa	tion	Rev – for comment s	and review	
Comments			•			
			Comments	l .		

Date

10.17

Signature

# Appendix A10 – Certificates Supplied by Client

All certificates or letters of confirmation provided by the Client (those other than taking over certificates, see Appendix A9) shall be filed here.

# **Appendix A11 – Certificates of Insurance**

All Subcontractors should be aware that their COI needs to be sent directly to Risk Management in our Broomfield Office. If a COI is received on site, it needs to be sent directly to Risk Management for processing. The sites should not be saving these to the ECM or updating the database. Contact Risk Management for a copy of Subcontractor's COI.

# Appendix A12 – Quality Nonconforming Reports

Project Name	Project.#		Date Issued in	nm-dd-yyyy 1	NCR#
Project Phase Development Operations	☐ Construction Project Type ☐ Warranty	☐ Wind	Battery Transmission	Met M	last
Nonconformance issued to:				70	
Company	Contract/	-0#		Phone	
Contact Name		mail			
Type of Nonconformance	Identified Durin	100000000000000000000000000000000000000	100		identified by
Item, Material, or Product   Documentation or Procedure	☐ Receipt Inspection ☐ Audit ☐ QC Inspection ☐ Test	Vendor \	Visit Name Role	-	
Description of Nonconformance	☐ qc inspection ☐ Fest	L utner	10000	2	
Proposed Corrective Action	Rework Reject Repair	Use As I	s Require En	gineering Auti	horization
Proposed Corrective Action	Rawork Reject Repair	Use As I	s Require En	gineering Auti	horization
Proposed Corrective Action	Rework Reject Repair	Use As I	s Require En	gineering Auti	horization
Proposed Corrective Action	Rework Reject Repair	Use As I	s Require En	gineering Auti	horization
Recipient Engineering Authorization (if Requi	Position				
Recipient	Position			Date	
Recipient Eingineering Authorization (if Requi	Position			Date	
Recipient Engineering Authorization (if Requi	Position Proposed Corrective Act			Date_ ate Corrective	
Recipient  Engineering Authorization (if Requi	Position			Date	
Recipient Engineering Authorization (if Requi	Position Proposed Corrective Act			Date_ ate Corrective Date_	
Recipient Engineering Authorization (if Requirements) RES Engineer Project Authorization Approved	Position Proposed Corrective Act Position			Date_ ate Corrective	
Recipient Engineering Authorization (if Requi Loosania  RES Engineer Project Authorization Approved Corrective Action Completion	Position Proposed Corrective Act Position  Position  Corrective Action Completed			Date	
Recipient Engineering Authorization (if Requi Loopsets:  RES Engineer Project Authorization Approved	Position Proposed Corrective Act Position			Date_ ate Corrective Date_	
Recipient Engineering Authorization (if Requi Loosenia  RES Engineer Project Authorization Approved Corrective Action Completion Recipient	Position Proposed Corrective Act Position  Position  Corrective Action Completed			Date	
Recipient Engineering Authorization (if Requisions) Loosens:  RES Engineer Project Authorization Approved Corrective Action Completion Recipient	Position Proposed Corrective Act Position  Position  Corrective Action Completed			Date	
Recipient Engineering Authorization (if Requi Lookent  RES Engineer Project Authorization Approved  Corrective Action Completion Recipient Locketti	Position Proposed Corrective Act  Position  Position  Corrective Action Completed Position	ion Authorize		Date	
Recipient Engineering Authorization (if Requision London Completion Project Authorization Approved Corrective Action Completion Recipient	Position Proposed Corrective Act Position  Position  Corrective Action Completed	ion Authorize		Date	

# **Appendix A12 – Quality Nonconforming Reports**

Actions To Prevent Recurrence	conformance and Corrective/Preventat	ive Action Report	Page 2 of Form 01478-000053, rev.
	Į.		
Recipient	Position	Date	
Preventative Action Agreed Originator Connects:	Preventative Action Agreed Position	Dete	
Preventative Action Completion Recipient	Preventative Action Completed Position	Date	
Preventative Action Verification Originator Comments:	Preventative Action Verified Complete Position	Date	
CLOSEOUT NCR/CPAR RES SRP Comments	Closed Position	Dete	



# PROJECT NAME WIND PROJECT

#### WEEKLY PROJECT REPORT

Weekly report no:	
Report for week period ending COB Friday:	
Calendar week no:	

# **Executive Summary**

# This Week's Highlights

- Highlight 1
- Highlight 2
- Highlight 3

#### This Week's Key Issues

- Issue 1
- Issue 2
- Issue 3

#### **Financial Status**

Description	EPC or BOP
Original Contract Price	\$
Change Orders to date	\$
Contract Price	\$
Invoiced to date (including retainage)	\$
Balance to finish (including retainage)	\$
Forecasted Costs	\$
Targeted Margin	\$
Forecasted Margin	\$
Budgeted Margin	\$



#### Safety

Applent and incident statistics for this period and to date are:

Туре	Lost Time	Injury (Medical Aid)	Minor Injury (First Aid)	Damage	Near Miss
Current Period					
Project To Date					

TRIR = #

Total recordable Incident Rate = (Lost Time + Medical Aid) \* 200,000 / Total Man Hours

RES Safety Index = #

((Lost Time \* 64) + (Injury \* 16) + (Minor Injury \* 4) + (Damage \* 1) + (Near Miss \* -0.25)) / Man Hours \* 1000

# <u>Safety</u>

\*Full description of week's Safety Report can be found in Exhibit 1

Week's Issues:

- •
- •
- •

Week's Highlights:

- •
- .

#### **Environmental**

\*Full description of week's Environmental Report can be found in Exhibit 2

Туре	Major Incident	Minor Incident	Near Miss
Current Period			
Project to Date			

Week's Issues:

- •
- •
- .

Week's Highlights:

- •
- •
- •

Project Name:												
	RES Issue	ed NCRs		RES Issue	d CPARs		Client Is:	sued NCRs		Client Iss	ued CPAR	3
Туре	Issued	Open	Closed	Issued	Open	Closed	Issued	Open	Closed	Issued	Open	Closed
Current Period												
Project to Date												
RES NCRs Issued De	etails:											
RES CPARs Issued E	Oetails:											
Week's Issues:												
Week's Highlight	ts:											



# Schedule Status

Project duration	# weeks
No. of weeks into contract	# weeks
Contract time passed (%)	%

	Waighted	Percent Complete					
Key Activities (Construction)	Weighted %	Contract Schedule	Construction Schedule	Actual			
Design Engineering	2.5%	60.0%		50.0%			
Roads & Crane Pads	15.0%	55.0%		50.0%			
Foundations	15.0%	75.0%		50.0%			
Collection System	15.0%	40.0%		50.0%			
Overhead Line	7.5%	29.0%		50.0%			
Substation	15.0%	85.0%		50.0%			
Switchyard	10.0%	96.0%		50.0%			
O&M Building	2.5%	65.0%		50.0%			
WTG Delivery, Erection, & MCC	15.0%	25.0%		20.0%			
Completion	2.5%	15.0%		50.0%			
	Over	44.3%					



# **Progress Report**

# Permit Status

Permit Type / Description	County/State	Responsible Group	Date Needed By	Status

- Permit Notes 1
- Permit Notes 2
- Permit Notes 3

#### **Procurement Status**

	SUBCONTRACTORS									
	PO # / SUBCONTRACT #	SUPPLIER	ACTUAL AWARD DATE	BUDGET AMOUNT	ACTUAL PO AMOUNT	COMMENTS				
Site Investigation										
Thermal Resistivity										
Electrical Resistivity										
Road Works										
Foundation Works										
O&M Building										
Collector System										
Substation										
Overhead Lines										
Turbine Erection										
Fiber Optic Terminator										
<u> </u>										
<u> </u>										



•			

	SUPPLIERS									
	PO # / SUBCONTRACT #	SUPPLIER	ACTUAL AWARD DATE	BUDGET AMOUNT	ACTUAL PO AMOUNT	COMMENTS				
MAIN Transformer										
Substation Equipment										
Substation Steel										
Pad Mounted Transformer										
Grounding Transformer										
MV Cable										
FAA Lighting										
Junction Boxes										
Electrical Rubber Goods										
Fiber Optic Cable										
DLO Cable										
Office Complex										

# **Construction Status**

Certificates	Total	Submitted	Signed
Foundation Completion Certificate			
Mechanical Completion Certificate			
Electrical Works Completion Certificate			
Project Mechanical Completion Certificate			
Project Substantial Completion Certificate			
Project Final Completion			

#### Comments:

- •
- •
- .



#### Roads & Crane Pads

	R	oads & Crane	Pads				
Item	Weighted %	ed % Budget Total Total Completed Remaining					
Roads	75%		Roads		50.0%		
Rough Grade	30%	10	5	5	50.0%		
Sub Grade	30%	10	5	5	50.0%		
1st Lift	10%	10	5	5	50.0%		
2nd Lift	10%	10	5	5	50.0%		
Shoulders	10%	10	5	5	50.0%		
Ditches	10%	10	5	5	50.0%		
Crane Pads	25%		Crane Pads		50%		
Cut & Subgrade Compacted	60%	10	5	5	50.0%		
Material Placed & Compacted	40%	10	5	5	50.0%		
			Roads & Crane	Pads Progress	50.0%		

#### Roads

\*picture\*

- Highlight 1
- Highlight 2

#### **Crane Pads**

- Highlight 1
- Highlight 2



#### **Foundations**

Foundations									
Item	Weighted %	Budget	Total Completed	Total Remaining	Percent Complete				
Excavations	10%	10	5	5	50.0%				
Mud Mats	596	10	5	5	50.0%				
Bases	40%	10	5	5	50.0%				
Pedestals	20%	10	5	5	50.0%				
Transformer Pad	5%	10	5	5	50.0%				
Backfilled	15%	10	5	5	50.0%				
Ground Ring	5%	10	5	5	50.0%				
_		•	Founda	tion Progress	50.0%				

- Highlight 1
- Highlight 2



#### Collection System

Item	Weighted %	Collection System  Quantity Total Received		Total Remaining	
Deliveries	30.0%				
Grounding Transformers	5.0%	10	5	5	50.0%
Pad Mount Transformer	20.0%	10	5	5	50.0%
DLO Cable	15.0%	10	5	5	50.0%
MV Cable	40.0%	10	5	5	50.0%
Fiber	5.0%	10	5	5	50.0%
Ground Cable	5.0%	10	5	5	50.0%
Junction Boxes	5.0%	10	5	5	50.0%
Rubber Goods	5.0%	10	5	5	50.0%
Installations	50.0%		50.0%		
Trench	50%	10	5	5	50.0%
MV & Fiber/Ground Cable	25%	10	5	5	50.0%
DLO Cable	10%	10	5	5	50.0%
Grounding Transformers	2%	10	5	5	50.0%
Pad Mount Transformer	9%	10	5	5	50.0%
Junction Boxes	4%	10	5	5	50.0%
Terminations	20.0%		50.0%		
Grounding Transformers	25.0%	10	5	5	50.0%
Pad Mount Transformer	25.0%	10	5	5	50.0%
Junction Boxes	25.0%	10	5	5	50.0%
Turbine	25.0%	10	5	5	50.0%
			Collection Syst	em Progress:	50.0%

- Highlight 1
- Highlight 2



# Overhead Line

Overhead Lines							
Item	Weighted %	ghted % Budget Total Receive		Total Remaining	Percent Complete		
Poles/Conductor Delivered	20.0%	10	5	5	50.0%		
Poles Set	40.0%	10	5	5	50.0%		
Cable Pulled	30.0%	10	5	5	50.0%		
Clipped & Sagged/Terminated	10.0%	10	5	5	50.0%		
Overhead Line Progress							

- Highlight 1
- Highlight 2



# Substation

Substation							
Item	Weighted %	Budget	Total Completed	Total Remaining	Percent Complete		
Deliveries	20%		50.0%				
Structural Steel	15.0%	10	5	5	50.0%		
Main Transformer	30.0%	10	5	5	50.0%		
Control House	15.0%	10	5	5	50.0%		
Relay Panel	15.0%	10	5	5	50.0%		
Arrestors	5.0%	10	5	5	50.0%		
Switches	10.0%	10	5	5	50.0%		
Breakers	10.0%	10	5	5	50.0%		
Construction	80%		50%				
Grading & Drainage	15.0%	10	5	5	50.0%		
Foundations	15.0%	10	5	5	50.0%		
Underground/Grounding	10.0%	10	5	5	50.0%		
Structural Steel Work	10.0%	10	5	5	50.0%		
Equipment Installation	10.0%	10	5	5	50.0%		
Control Building/Wiring	10.0%	10	5	5	50.0%		
Transformer Fit Out	10.0%	10	5	5	50.0%		
Commission	10.0%	10	5	5	50.0%		
Fence, Gravel, & Clean Up	10.0%	10	5	5	50.0%		
			Substa	ation Progress	50.0%		

<sup>\*</sup>picture\*

- Highlight 1
- Highlight 2



# Switchyard

Item	Weighted %	Budget Total Completed		Total Remaining	Percent Complete
Deliveries	20%		50.0%		
Structural Steel	20.0%	10	5	5	50.0%
Control House	20.0%	10	5	5	50.0%
Relay Panel	20.0%	10	5	5	50.0%
Arrestors	10.0%	10	5	5	50.0%
Switches	15.0%	10	5	5	50.0%
Breakers	15.0%	10	5	5	50.0%
Construction	80%		50%		
Grading & Drainage	20.0%	10	5	5	50.0%
Foundations	20.0%	10	5	5	50.0%
Underground/Grounding	10.0%	10	5	5	50.0%
Structural Steel Work	10.0%	10	5	5	50.0%
Equipment Installation	10.0%	10	5	5	50.0%
Control Building/Wiring	10.0%	10	5	5	50.0%
Commission	10.0%	10	5	5	50.0%
Fence, Gravel, & Clean Up	10.0%	10	5	5	50.0%
			Substa	tion Progress	50.0%

- Highlight 1
- Highlight 2



#### **O&M Building**

O&M Building							
Item	Weighted %	Budget	Total Completed	Total Remaining	Percent Complete		
Design	5.0%	10	5	5	50.0%		
Delivery	10.0%	10	5	5	50.0%		
Building OnSite & Erected	10.0%	10	5	5	50.0%		
Grading & Drainage	5.0%	10	5	5	50.0%		
Foundations - Floor Slab	5.0%	10	5	5	50.0%		
Steel Structure	10.0%	10	5	5	50.0%		
Cladding	10.0%	10	5	5	50.0%		
Internal Walls & Ceiling	10.0%	10	5	5	50.0%		
Fit Out Electrical & Plumbing	15.0%	10	5	5	50.0%		
Cleaning/Decorating	10.0%	10	5	5	50.0%		
External Work	10.0%	10	5	5	50.0%		
O&M Building Progress							

- Highlight 1Highlight 2



#### Turbine Deliveries, Erection, and MCCs

		Turk	oines					
Item	Weig Without Commissionin g	with Commissioning	Budget	Total Received	Total Remaining	Percent Complete		
Deliveries	20.0%			Deliveries				
Base	10	10.0%		2	8	20.0%		
Mid	10	.0%	10	2	8	20.0%		
Тор	10	.0%	10	2	8	20.0%		
Hub	10	.0%	10	2	8	20.0%		
Nacelle	35	35.0%		2	8	20.0%		
Blades	25.0%		10	2	8	20.0%		
Erection	45.0%	40.0%		Erection		20.0%		
Base	10	.0%	10	2	8	20.0%		
Mid	10.0%		10	2	8	20.0%		
Тор	10.0%		10	2	8	20.0%		
Nacelle	20.0%		10	2	8	20.0%		
Rotor	20	20.0%		2	8	20.0%		
Electrical Build-out	30	30.0%		2	8	20.0%		
Mechanical Completions	35.0%	35.0% 30.0%		Mechanical Completions				
Walk-down	50	.0%						
Submitted	25	.0%	10	2	8	20.0%		
Signed	25	25.0%		2	8	20.0%		
Commissioning	0.0%	10.0%		Commissionin	g			
Commissioned	60	.0%			0			
Submitted	20.0%				0			
Signed	20	.0%		·	0	·		
				Turbi	nes Progress	20.0%		

- Highlight 1
- Highlight 2

## **Appendix B1- Weekly Progress Reports**



#### Completion

Completion						
Item	Weighted %	Budget	Total Completed	Total Remaining	Percent Complete	
Site Restoration	50.0%		50.0%			
Reseeding	50%	10	5	5	50.0%	
Roads	50%	10	5	5	50.0%	
Job Books	25.0%	10	5	5	50.0%	
As-Builts	25.0%	10	5	5	50.0%	
	•		Comple	tion Progress	50.0%	

\*picture\*

- Highlight 1
- Highlight 2

#### Met Mast

\*picture\*

- Highlight 1
- Highlight 2

Initial Contr	act Review	- Schedulin	g & Attendance Form	Meeting Date
Project Name			•	Project Number
				3.5.5
Location:	State/Prov	ínce	Project Mailing Addr	ress
US			1.1	
Canada				
Other				
Project Type	Contract Ty	ne e	Client	Contract Start Date
Wind	EPC			
Solar	ВОР	<u> </u>		Target Completion Date
Transmission	Other			
Required Attende	es: Name	4.0		osition
	Haire		Lead SRP (Senior Respo	Service Control of the Control of th
			Project Manager (PM)	A CONTRACTOR OF THE STANDARD SHALL
			Assistant PM (APM)	
			Project Construction M	anager (CM)
			Project Civil Manager (	CivM)
			Project Electrical Mana	ger (EM)
			Project Turbine Manage	er (TM)
			Project Superintendent	(as applicable)
			Project Safety Supervis	or
			Project Environmental	Supervisor
			Project QA/QC Coordin	ator
			Project Administrator	
			SRP - HSQE Manager (or	r designee)
			Lead Civil Engineer	
			Lead Electrical Enginee	er .
			Lead Mechanical/Solar	Engineer
			SRP - Procurement (or	are discontinue como a con-
			SRP - Construction Acco	AND THE PARTY OF T
				elopment (if RES Americas 1/or Pre-Construction Group
			SRP - Contracts Group	
			SRP - Legal Department	t
			SRP - Estimating Group	

#### Initial Contract Review Form

1.0	Contract Information						
		Cl	ient Contacts				
	Name		Email			Phone	•
1.1							
	RES Contacts						
1.2							
	Are there any Limited Notices to Proceed or other pre-construction contracts?						NO
	Contract or I	NTP Number			Va	lue	
1.3	conduct of ENTP Number				10		
				YES	NO	Date	
		Received Board Approval?					
1.4	Has the contract	Been signed by RES?					
		Been signed by Client?					
1.5	Has RES received Full Notice to P	roceed (N	TP)?				
	Are there any special terms or co	nditions n	ot typical to RES?				
	If yes, provide specifics below:						
1.6							
						YES	NO
1.7	Contract Checklist distributed by	Legal?					
	Questions or concerns regarding	items on t	he Contract Checklist				
1.8							
1.0							

#### Follow up Actions

Item #	Action Required	Responsible Party	Target Date

#### Initial Contract Review Form

2.0	Finance/Project Accounting				
	Has project accountant been appointed				
2.1	Name	Email	Phone		
2.2	Has project budget been provided to Project accountants?				
2.3	Have all Limited Notices to Proceed or other pre-construction contracts been reconciled to project books?				
	Comments				
2.4	4				

#### Follow up Actions

Item #	Action Required	Responsible Party	Target Date
			·

	What insurance coverage and limits are required for this			Limits		Insurance In Place		
	work?	20	Ciriles		YES	Date		
	Workers Compensation (WC)	]						
	General Liability (GL)	:						
3.1	Auto Liability (AL)							
	Umbrella and Excess Liability (UMB/XS)							
	Professional Liability (PL)							
	Builders Risk (BR)							
	Pollution Liability (CPL or PLL)							
3.2	Who is procuring Builder Risk (BR) Insurance?		Client					
50.EX	If not RES, has RES be provided a copy of the BR policy?							
	Does the Client or a 3 <sup>rd</sup> party require a Certificate of Insurance (COI)? List designated recipients below					Date Sent		
3.3	Contact or Company Name Email		or Address		Phone			
	Are there any surety bond requirements for If so, detail terms, conditions and amounts below	production and the second						
3.4		production and the second	Su	m of rety rided?		Amount		
3.4	If so, detail terms, conditions and amounts below	production and the second	Su	rety		Amount		
3.4	If so, detail terms, conditions and amounts below	W.	Su	rety		Amount		
9.540E	If so, detail terms, conditions and amounts belo Terms and Conditions	w. Site?	Prov	rety		Amount		
3.8	How many RES company vehicles will be on Are any auto ID cards needed and are they	w. Site? maintained with	Su prov	rety rided?		Amount		

## Initial Contract Review Form

	Туре	Size	Purpose	Date Onsite			
	Any other property or Project? (i.e. yellow in If so, list below.						
3.12	12						
3.13	Has RES or REC equipment, power units and yellow iron been properly maintenance-serviced, licensed/registered and insured prior to use at the job-site?						

#### Follow up Actions

Item #	Action Required	Responsible Party	Target Date

# 4.0 HSQE

4.1	Safety					
	Has project Safety Supervisor been appo	inted?		YES		
	Name	Email	Phone			
4.1.1						
	When will the Safety Supervisor be on site?					
4.1.2	Safety Program File status or date of app	roval:				
4.1.3	Does the state where the project is being constructed have its own OSHA rules?					
4.1.3	Are there any additional program requirements that will need to be addressed?					
	(List below under 4.1.4)					
	Are there any special contract requireme (List Below)	ents for Health & Safety Program?				
4.1.4						
	Has an occupational facility been identified for work related injuries?  (List below)					
4.1.5						
4.2	Quality					
	Has a project QAQC Coordinator been ap	pointed?				
4.2.1	Name	Email	Phone			
	When will the QA/QC Coordinator be on site?					
4.2.2	Construction Quality Plan status or date	of approval:				
4.2.3	Will any project specific procedures, work instructions, or templates be required?  (If known, list below)					

#### Initial Contract Review Form

	Discipline		Торіс		nsible rson	
4.2.4	Construction Inspection	n & Test Plan statu	is or date of approval:			
4.3	3 Environmental					
	Has a project Environm					
	Name		Email	Pho	one	
4.3.1						
	When will the project F	Date				
	When will the project Environmental Supervisor be on site?					
4.3.2	Who prepared the Storm Water Pollution Prevention Plan (SWPPP)?				Client	
4.3.3	Who will be responsible	for verifying con	onliance to the SWDDD?			
4.3.3	Willo Will be responsible	rior verifying con	ipilance to the swrrr:			
4.3.4	Construction Environme	ental Plan status o	or date of approval:			
4.3.5	Has the Project Spill Pr	evention and Resp	oonse Plan (SPAR) been issued?			
4.3.6	Has the Project Spill (SPCC) been issued?	Prevention, Con	trol, and Countermeasures Plan			
4.3.7	Do we have the Permit	ting Conditions?				
	Are there any environn (If so, list below)	nental restrictions	?			
4.3.8						
			to provide support to Project Mana	ager?		
4.3.9	(If so, has one been contracte	ed?)	- 5			
	Name		Email	Pho	one	
l	I			ı		

#### Follow up Actions

Item #	Action Required	Responsible Party	Target Date

Initial Contract Review Form

# 

#### Initial Contract Review Form

5.2	Materials Procurement				
	List below the known materials	that RES will procure for this project.			
	Material Description	Supplier	PO Issue Date	Quantity Required	Delivery Target Date
5.2.1					
5.2.2	Are all key contractors and sup	pliers on the Approved Supplier List?			

#### Follow up Actions

Item #	Action Required	Responsible Party	Target Date

6.0	Project	Coordination					
	List items received from previous projects below:						
	ltem .		Originati	ng Project	Date Received Onsite		
	Storage Con	tainer / Connex					
	Plotter						
6.1	IT Box						
	Multi-Purpos	se Printer					
	Radio						
	Furniture						
	Other						
6.2	Has a local	Administrative Assistant been hi	red?				
	Name:			Contact number	=		
6.3	Have arrangements been made for internet service?						
	Provider:			Install Date:			
6.4	Have arrangements been made for phone service?						
	Provider:			Install Date:			
6.5	Have the co	omms been coordinated with SCA	ADA Enginee	ring?			
6.7		rary air cards be required? long & how many?)					
6.8	Have the project specific ECM file folders been setup for the project?						
	Additional Requirements / Comments						
6.9							

Item Number	Action Required	Responsible Party	Target Date

7.0	Engineering						
	Is RES engineering this project?					YES	NO
7.1	If no, list details of the	responsi	ble engineering	company below	:		
	Company Name		Main C	ontact	F	hone Numbe	er
	Are there any project s	pecific E	ingineering requ	irements?		YES	NO
7.2	(If so, list below)						
						YES	NO
7.3	Has RES Engineering re	ceived a	drawing schedu	ile?			
	List RES Engineered drawing details below:						
	Scope	Lea	d Engineer	Status		Target IFC Is	ssue Date
7.3							
	List 3 <sup>rd</sup> Party Engineere	d drawir	ng details below	:	'		
	Scope Status Reviewed by RES			RES	Target IFC Issue Date		
7.4							
/							
7.5	Additional Comments						

Item Number	Action Required	Responsible Party	Target Date

8.0	Discussion		
Item Number	Risk/Concern	Mitigation	Responsible Party



## TECHNICALENQUIRY FORM No.: Project Number - XXX

	SECTION .	1- to be completed by Originator
Project No XXXX	Name "Project	Name"
TEF originated by Name:		Date sent to the Recipient:
Company:		
Recipient(s) of the TE	<b>F</b> ê	
Name:		Company:
(attach further pages i	f required)	
Response requested b		2 - to be completed by Recipient
Response to Technica		as to so completed by the definition
Signature of Recipien		Date 8 - to be completed by Originator
Response Accepted/R		
Reason for rejection (	f applicable):	
Signed by Originator		Date

# P-4 RES Quality Manual



# **RES Americas Quality Manual**

Document: 01478-000692

Revision: 02

This Procedure has been prepared by Renewable Energy System Americas Inc. ("RES Americas") in accordance with internal procedures and mandates and is Confidential Information. If this Procedure is an exhibit to a contract or agreement, then this Procedure, in the form attached to the contract, shall be subject to only those express representations or warranties regarding the exhibits to such contract, if any. Except for such representations, RES Americas provides this Procedure "AS-IS" and does not represent, and RES Americas expressly disclaims, that the procedures or material contained in this Procedure have been prepared pursuant to any particular methodology, are accurate or complete, or that they reflect the current status of applicable law. Portions of this Procedure may be excerpted or redacted and this Procedure is subject to revision or update at any time. Any party utilizing this Procedure, or any matter or information derived from it, ("Recipient") does so at his/her/its own risk and agrees to make his/her/its own investigation regarding his/her/its legal or other obligations for performance of his/her/its work. No Recipient shall have any right or claim against RES Americas or any of its affiliated companies with respect to the Procedure.

HSQE PROCEDURE				
TITLE:	DOC No: 01478-000692	REV No: 02		
RES Americas Quality Manual	PAGE: 1 of 19	DATE: 06/04/15		

## **Revision History**

Revision #	Date	Nature of Revision
02	6/1/15	Updated Executive Leadership

HSQE PROCEDURE				
TITLE:	DOC No: 01478-000692	REV No: 02		
RES Americas Quality Manual	PAGE: 2 of 19	DATE: 06/04/15		

## **TABLE OF CONTENTS**

1.0	QUAL	LITY POLICY	3			
2.0	QUALITY MANAGEMENT SYSTEM					
3.0	QUAL	QUALITY MANUAL				
	3.1	Purpose	3			
	3.2	Scope	3			
	3.3	Company Structure	3			
	3.4	RES Americas Office Locations	4			
	3.5	RES Americas - Overall Quality Assurance Process	4			
	3.6	Quality Program Scope and Requirements	5			
	3.7	Company Procedures	17			
	3.8	Company Organization Chart	18			

HSQE PROCEDURE		
TITLE:	DOC No: 01478-000692	REV No: 02
RES Americas Quality Manual	PAGE: 3 of 19	DATE: 06/04/15

#### 1.0 QUALITY POLICY

The RES Quality Policy is incorporated here by reference, as the Policy is subject to separate review and approval: USQM - 001 RES Americas Quality Policy - reference number 01478-000284

#### 2.0 QUALITY MANAGEMENT SYSTEM

In fulfillment of the RES Americas Quality Policy, RES Americas has established and documented a Quality Management System (QMS) to identify and document the processes RES Americas uses to deliver its products and services, and to control the development and delivery of these products and services to assure customer satisfaction and stakeholder value.

The RES Americas Quality Management System (QMS) consists of a Quality Manual addressing the details and scope of the RES Americas QMS, and various companywide and departmental procedures and documents that serve to control the processes used to deliver our products and services, and to assure achievement of the desired levels of quality.

#### 3.0 QUALITY MANUAL

#### 3.1 Purpose

This RES Americas Quality Manual shall establish and outline the fundamental elements of the quality management system that will assure compliance with the Quality Policy objectives of RES Americas. Adherence to the Quality Requirements established in this Manual by all employees of RES Americas shall allow RES Americas to fulfill its mission as a quality leader in the renewable energy industry.

#### 3.2 Scope

Unless specifically noted herein, this procedure shall apply to all Work conducted by/for Renewable Energy Systems Americas Inc. and any of its affiliate or subsidiary companies hereafter referred to in this procedure as the "RES Americas".

#### 3.3 Company Structure

#### 3.3.1 The executive leadership of RES Americas is:

Glen Davis	Chief Executive Officer
Andrew Fowler	Chief Operating Officer
Paul Walker	Chief Financial Officer
Robert Morgan	Chief Strategy Officer
Brian Evans	Chief Development Officer
Andrew Oliver	Chief Technology Officer
Marcia Emmons	Executive Vice President & General Counsel
Douglas Nieb	Executive Vice President, Human Resources

HSQE PROCEDURE		
TITLE:	DOC No: 01478-000692	REV No: 02
RES Americas Quality Manual	PAGE: 4 of 19	DATE: 06/04/15

#### 3.4 RES Americas Office Locations

3.4.1 RES Americas operates at the following locations across the Americas:

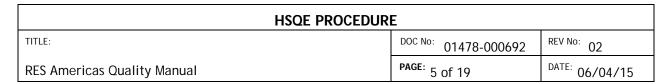
UNITED STATES		
CORPORATE HEADQUARTERS		
Renewable Energy Systems Americas Inc. 11101 W. 120 <sup>th</sup> Ave Suite 400 Broomfield, CO, USA 80021		
US Regional Development Offices		
RES Americas 330 2 <sup>nd</sup> Ave. South, Suite 820 Minneapolis, MN, USA 55401		
RES Americas 9050 Capital of Texas Highway North, Suite 390 Austin, TX, USA 78759		

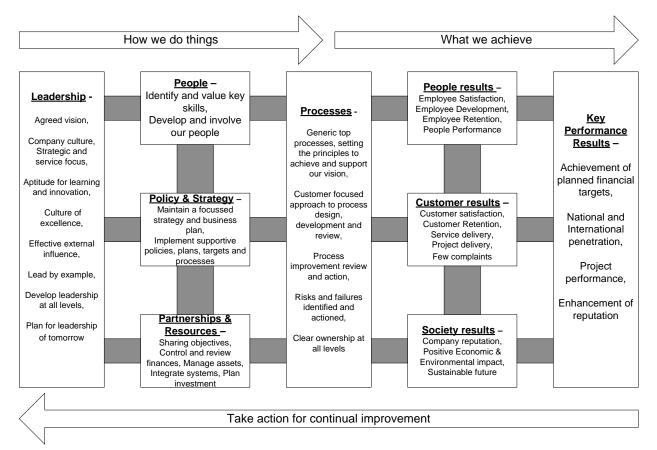
CANADA
Renewable Energy Systems Canada Inc. 300 Leo-Pariseau, Suite 2516 Montreal, QC, Canada H2X 4B3
RES Canada Construction (Ontario) Inc. 1040 S. Service Road East, Suite 200 Oakville, ON, Canada L6J 2X7

CHILE
RES Chile SPA
Andres Bello 2115, Oficina 1001, piso 10
Providencia, Santiago, Chile

## 3.5 RES Americas - Overall Quality Assurance Process

RES Americas adheres to the model of a process based approach, and the Plan-Do-Check-Act (PDCA) methodology that is promoted by ISO 9001 (2008). The high level model below portrays RES Americas approach to quality management and continuous quality improvement.





#### 3.6 Quality Program Scope and Requirements

3.6.1 The following quality program requirements form the basis of the RES Americas Quality Management System (QMS), and shall direct the establishment, implementation, and maintenance of procedures and documents to fulfill the quality objectives of RES Americas.

#### 3.6.2 General

- a) RES Americas shall develop procedures for the realization of quality in products and services from development and planning stages through to construction and maintenance & operations. The procedures shall:
  - (1) Identify the quality requirements for the product/service. These requirements shall include customer requirements, statutory and regulatory requirements, contract requirements, and stakeholder and organizational requirements.
  - (2) Establish processes and controls to assure that quality requirements are considered and understood prior to commitment to supply, and are defined and effectively during product fulfillment. This includes consideration that RES Americas has the ability to meet the stated

HSQE PROCEDURE		
TITLE:	DOC No: 01478-000692	REV No: 02
RES Americas Quality Manual	PAGE: 6 of 19	DATE: 06/04/15

requirements, and that any differences in quality expectations are understood and resolved prior to contract signing.

- (3) Establish acceptance criteria to allow for verification of quality requirements at appropriate times during product/service fulfillment and at delivery, including acceptance criteria for requirements that may not be customer specified but are necessary for the specified or intended use of the product or delivery of the service.
- (4) Require review, verification, validation, monitoring, measurement, inspection, and/or test as appropriate, to assure attainment of the specified quality requirements.
- (5) Establish documents and records that provide evidence that processes were applied and quality requirements were achieved.

#### 3.6.3 Resource Management

a) RES Americas shall determine, deploy, and regularly evaluate the level and suitability of resources required to effectively and efficiently administer the QMS. Considerations will include system effectiveness, process improvements, and customer satisfaction.

#### 3.6.4 Human Resources

- a) All RES Americas personnel performing work affecting the quality of the products and services provided shall be competent on the basis of appropriate education, training, skills, and experience.
- b) RES Americas shall establish and implement processes to:
  - (1) Define the necessary competence for personnel performing work affecting the quality of the products and services delivered by RES Americas.
  - (2) When necessary, provide training, re-training, or other actions to achieve and assure the required level of competence, including evaluations of the effectiveness of the actions taken.
  - (3) Assure that personnel are aware of the relevance and importance of their activities, and how they contribute to the achievement of RES Americas quality objectives.
  - (4) Document and maintain records demonstrating education, training, skills, and experience for all personnel performing work affecting quality.

#### 3.6.5 Infrastructure & Work Environment

HSQE PROCEDURE		
TITLE:	DOC No: 01478-000692	REV No: 02
RES Americas Quality Manual	PAGE: 7 of 19	DATE: 06/04/15

- a) RES Americas shall determine, provide, and maintain the necessary infrastructure to facilitate and assure the achievement of quality in the products and services provided. This shall include:
  - (1) Buildings, workplaces, and associated utilities.
  - (2) Process equipment including necessary hardware and software.
  - (3) Supporting equipment and services including transportation, IT, and communications.
- b) RES Americas shall provide and manage a suitable work environment that assures the ability to achieve product and service quality expectations.

#### 3.6.6 Control of Development and Design

- a) RES Americas shall control development and design activities to assure the quality and reliability of the final product. This will include controls to assure that interfaces between different RES Americas departments and/or with external organizations are managed to assure effective communication and clear assignment of responsibility.
- b) Development and design process controls shall include:
  - (1) Designation of stages within development or design, with review, verification, validation, and authorization steps as appropriate to assure stated quality, customer, contract, and business objectives are being considered.
  - (2) Delineation of responsibilities and authorities for each stage of development or design.
  - (3) Clear delineation of input requirements to be considered during development or design, and documented review of such inputs for adequacy. Typical inputs to consider include:
  - (4) Functional and performance requirements
  - (5) Statutory and regulatory requirements
  - (6) Business requirements
  - (7) Customer and contract requirements
  - (8) Information derived from previous developments or designs
  - (9) Other requirements essential for product/service quality

HSQE PROCEDURE		
TITLE:	DOC No: 01478-000692	REV No: 02
RES Americas Quality Manual	PAGE: 8 of 19	DATE: 06/04/15

(10) Clear delineation of the desired output(s) from the development or design processes in a format suitable for verification against the specified inputs thereby enabling approval prior to release.

#### 3.6.7 Development of Design Outputs

- a) Development or design outputs shall be of a format that allows for:
  - (1) Verification that all input requirements are met.
  - (2) Use by other departments for further activities including permitting, design, engineering, pre-construction, bidding/estimating, contract preparation, procurement, construction, and/or operations & maintenance.
  - (3) Identification of acceptance criteria for developed or designed product, including delineation of characteristics essential for safe and proper use or operation.

#### 3.6.8 Development or Design Reviews

- a) Develop or design reviews shall:
  - (1) Be planned and conducted as appropriate to assure that the process is advancing in accordance with stated requirements.
  - (2) Allow for identification and resolution of any problems before the final product is delivered.
  - (3) Participants in development or design reviews shall represent all departments concerned with the output.
  - (4) Planned reviews shall be documented and records retained to evidence elements considered and actions taken.

#### 3.6.9 Development or Design Verification

- a) Verification is a composite or total review of the output that provides for alternate analyses, calculations, or proof testing in addition to a typical design review. The intent is to assure that the outputs of the development or design process meet the specified inputs requirements.
- b) Development or design verification shall be planned, performed, documented, and records of the results and any required actions retained.

#### 3.6.10 Development or Design Validation

HSQE PROCEDURE		
TITLE:	DOC No: 01478-000692	REV No: 02
RES Americas Quality Manual	PAGE: 9 of 19	DATE: 06/04/15

- a) Validation is a further step to assure that the finished product or service fully achieves its intended purpose or application. Ideally validation is performed prior to final delivery of the product or service, but may require post installation proof or performance testing.
- b) Development or design validation shall be planned, performed, documented, and records of the validation process and any required actions retained.

#### 3.6.11 Development or Design Changes

- a) Changes, whether initiated during the process or resulting from reviews, verification, or validations, shall be identified and recorded.
- b) Changes shall be controlled the same as the original development or design, i.e., changes shall be reviewed, verified, and validated.
- c) Reviews of changes shall evaluate the effect of the change on the original plan, and on any plans, parts, or products already delivered.
- d) Records of changes and their review, verification, and validation shall be retained.

#### 3.6.12 Control of Procurement

- a) RES Americas shall control the process for the procurement of products or services that that make up, in part or in total, or contribute to the product or service being delivered by RES Americas.
- b) Procurement of product and services shall be controlled to the extent necessary to assure that the purchased product or contracted service conforms to specified requirements including technical and performance requirements.
- c) Product and service suppliers shall be evaluated and selected based on their ability to supply product or perform service in accordance with RES Americas requirements.
- d) Criteria for selection, evaluation, and continued or re-evaluation shall be established, documented, and communicated.
- e) Records of supplier evaluations and any actions resulting from such evaluations shall be maintained.
- f) Procurement of Products
  - (1) Purchasing information shall describe the product to be purchased including, as appropriate:

HSQE PROCEDURE		
TITLE:	DOC No: 01478-000692	REV No: 02
RES Americas Quality Manual	PAGE: 10 of 19	DATE: 06/04/15

- a. Technical requirements
- b. Performance requirements
- c. Manufacturing (in-process and/or final) inspection or test requirements
- d. Qualification requirements for personnel involved in manufacturing, inspection, or test.
- e. Supplier quality management systems requirements or expectations
- f. Documentation, certification, and/or records requirements for product(s).

#### (2) Product Inspection

a. Inspections shall be planned and performed to verify that the product meets specified purchase requirements. This generally is accomplished by documented receiving inspections but may include in-process manufacturing inspection and/or pre-shipment product inspection or performance testing.

#### g) Procurement of Services

- (1) The procurement of services by RES Americas shall be planned and controlled to assure that all relevant requirements for the service(s) are fulfilled. Such controls shall include:
  - a. Documentation describing the service(s) to be provided.
  - b. Procedures or work instructions, as necessary, to govern the provision of the required service(s).
  - c. Delineation of suitable or required equipment for provision of the service(s).
  - d. Delineation of any necessary measuring and test equipment, including calibration and certification requirements.
  - e. Personnel qualification requirements, including required training, licensing, and/or certification records.
  - f. Management program requirements including Health & Safety, Environmental, and Quality program requirements.

HSQE PROCEDURE		
TITLE:	DOC No: 01478-000692	REV No: 02
RES Americas Quality Manual	PAGE: 11 of 19	DATE: 06/04/15

- g. Any other functional, performance, regulatory, statutory, business, customer, or RES Americas requirements for the service(s) to be provided.
- h. Delineation of documentation and records required as a deliverable for the service(s) to be provided.

#### 3.6.13 Quality Control

a) RES Americas shall plan, execute, document, and retain records evidencing quality control inspections and/or tests performed to verify the adequacy of a service provided.

#### (1) Verification

- Inspections shall be conducted to verify that the acceptance criteria established for the installed product or delivered service has been achieved.
- b. Documentation shall be prepared to record the results of such inspections, including recording of any identified nonconforming items.
- c. Records of quality control inspections shall be retained.

#### (2) Validation

- a. Validation of an installed product or delivered service shall be conducted whenever appropriate, including whenever the adequacy of the product or service cannot be readily or definitively determined by inspection alone, or when a deficiency may only become apparent after the product has been used or the service has been delivered.
- b. Validation shall demonstrate the ability of the product or service(s) to achieve planned results.
- c. Validation shall include:
- d. Defined criteria for review and approval of the validation process
- e. Approval of equipment (when required) for validation
- f. Qualification of personnel
- g. Use of specific methods and/or procedures
- h. Documentation and records requirements

HSQE PROCEDURE		
TITLE:	DOC No: 01478-000692	REV No: 02
RES Americas Quality Manual	PAGE: 12 of 19	DATE: 06/04/15

i. Re-validation process (as necessary).

#### (3) Identification and Traceability

- a. When appropriate, RES Americas shall establish controls to identify and trace a product from conception through final installation.
- b. Identification and traceability shall be by means of a unique identification.
- c. Documentation shall be generated, and records maintained as appropriate.

#### (4) Customer Property

- a. RES Americas shall establish processes to safeguard, secure, and control the use of customer property, including intellectual property, while in RES Americas possession.
- b. Loss of any customer property will be immediately reported to the customer.
- c. Records of customer property in RES Americas control will be maintained.

#### 3.6.14 Control of Measuring & Test Activities and Equipment

- a) RES Americas shall assure that processes are established and documented to assure that monitoring and measurement activities can and are carried out in a manner consistent with monitoring and measurement requirements specified, and that appropriate monitoring and measurement equipment is specified.
- b) Measuring & Test Equipment (M&TE)
  - (1) When necessary to assure valid results, measuring & test equipment shall:
    - a. Be calibrated or verified, or both at specified intervals or prior to use against measurement standards traceable to international or national measurement standards. Where no standards exist, the basis used for calibration or verification shall be documented.
    - b. Be adjusted or re-adjusted as necessary to meet standards prior to use.
    - c. Have identification that demonstrates its calibration status.

HSQE PROCEDURE		
TITLE:	DOC No: 01478-000692	REV No: 02
RES Americas Quality Manual	PAGE: 13 of 19	DATE: 06/04/15

- d. Be safeguarded from adjustments that would invalidate any measurement result.
- e. Be protected from damage or deterioration during handling, maintenance, or storage.

#### c) Measurement Validity

(1) If a piece of measuring & test equipment is found to be nonconforming prior to use, RES Americas shall assess and record the validity of any previous measurements, and take appropriate actions on any affected product.

#### d) Records

(1) Records of the results of calibrations and verification for RES Americas measuring & test equipment, and/or any such equipment used for RES Americas products shall be maintained.

#### e) Computer Software

(1) RES Americas shall establish processes to confirm that computer software used in the monitoring and measurement of specified requirements satisfies the intended application, both prior to use and as necessary at other stages.

#### 3.6.15 Control of Nonconformances

- a) RES Americas shall establish processes to assure that products or services that do not conform to stated requirements are identified and controlled to prevent their use or delivery.
- b) A documented procedure shall be established and implemented to specify the controls, responsibilities, and authorities for identifying nonconformances and for addressing resolution.
- c) Resolution of nonconformances shall be by one or more of the following actions:
  - (1) Immediate action to eliminate the detected nonconformity. (REJECT)
  - (2) Taking action to correct, if possible, the nonconforming aspect or element, thereby resolving the nonconformance. (REPAIR)
  - (3) Authorizing it use, release, or acceptance under concession by the original approving authority, and when applicable, the customer. (USE AS IS)

HSQE PROCEDURE		
TITLE:	DOC No: 01478-000692	REV No: 02
RES Americas Quality Manual	PAGE: 14 of 19	DATE: 06/04/15

- d) When the conforming product is corrected it shall be subject to reverification to demonstrate conformity to the original requirements.
- e) Records of nonconformances and actions taken, including concessions obtained, shall be retained.

#### 3.6.16 Control of Documents

- a) RES Americas shall establish processes to identify and control documents that assure and evidence conformance with the stated quality requirements of RES Americas.
- b) A documented procedure shall be established delineating the controls, responsibilities, and authorities for:
  - (1) Reviewing for adequacy, and approving documents prior to use.
  - (2) Revision control, including controls for revising documents and for assuring that only the most current approved revision is used for work activities.
  - (3) Document legibility and identification, including identification of obsolete documents.
  - (4) Document distribution and availability at work stations, and document retention.
  - (5) External document receipt, distribution, and controlled use.

#### 3.6.17 Control of Records

- a) RES Americas shall establish processes to identify and control the retention of records that provide evidence of conformance with the stated quality requirements of RES Americas.
- b) A documented procedure shall be established to delineate the controls for record identification, control, storage, protection, retrieval, retention, and disposition.
- c) Records shall remain legible, readily identifiable, and retrievable.

#### 3.6.18 Monitoring and Measurement

- a) Process Monitoring and Measurement
  - (1) Methods for monitoring, and as applicable, measuring quality assuring processes to demonstrate the ability of the processes to achieve planned results, shall be established.

HSQE PROCEDURE		
TITLE:	DOC No: 01478-000692	REV No: 02
RES Americas Quality Manual	PAGE: 15 of 19	DATE: 06/04/15

- (2) When planned results are not achieved, appropriate corrective actions shall be taken.
- b) Product Monitoring and Measurement
  - (1) Methods for monitoring and, as applicable, measuring the characteristics of a product or service to assure conformance to stated quality requirements shall be established. This may necessitate multiple monitoring or measurements at stages during product realization.
  - (2) Evidence of conformity to established acceptance criteria shall be documented and retained.
  - (3) Records shall evidence the responsibility and authority for authorizing release of a product.
- c) Customer Satisfaction
  - (1) Customer satisfaction shall be determined by various means including interviews, report cards, etc. to enable RES Americas to realize whether customer requirements have been achieved.
  - (2) Appropriate records shall be retained
- 3.6.19 Quality Management Program Assessment
  - a) RES Americas shall establish processes for determining, collecting, measuring, evaluating, and analyzing the suitability, performance, and effectiveness of its QMS. At a minimum, these processes will include the following:
    - (1) Internal Audits
    - (2) Internal audits shall be conducted at planned intervals to determine whether the OMS:
      - a. Conforms to the stated requirements of the RES Americas Quality Policy, and Quality Manual.
      - b. Is being effectively implemented and maintained.
    - (3) A documented audit program shall be established to include:
      - a. Delineation of responsibilities and authorities for planning and conducting audits, including review of past audits.
      - b. Qualification of auditors.

HSQE PROCEDURE		
TITLE:	DOC No: 01478-000692	REV No: 02
RES Americas Quality Manual	PAGE: 16 of 19	DATE: 06/04/15

- c. Frequency of audits taking into consideration the status and importance of the processes and activities to be audited (i.e., those impacting quality).
- d. Delineation of audit format including criteria, scope, and methods.
- e. Delineation of the nature of audit records, including objective evidence of quality.
- f. Process for audit follow-up, including verification of corrective actions, and actions to preclude recurrence.
- (4) Records of audits and their results shall be maintained.
- (5) Management of audited departments/groups within RES Americas shall participate in internal audits, cooperate with assigned auditors, apply resources as necessary to facilitate efficient performance of audits, and assure that agreed corrective actions and actions to preclude recurrence are promptly performed.

#### 3.6.20 Communication

- a) RES Americas shall develop and implement processes for effectively communicating with customers in relation to:
  - (1) Product or service information, including quality expectations.
  - (2) Contract considerations including enquiries, status, and changes.
  - (3) Feedback including complaints.

#### 3.6.21 Process Improvement

- RES Americas shall establish processes to continually improve the effectiveness of its QMS, and the quality of its products and delivery of its services.
- b) Documented procedures shall be established and implemented to assure corrective actions taken address both the immediate cause of the nonconformance, and the root cause so that actions can be taken to prevent future occurrences.
- c) Records of process improvements, including corrective actions, actions taken to prevent recurrence, and verifications shall be retained.

#### 3.6.22 Management Review

HSQE PROCEDURE		
TITLE: DOC No: 01478-000692 REV No: 02		REV No: 02
RES Americas Quality Manual	PAGE: 17 of 19	DATE: 06/04/15

- a) RES Americas leadership shall review the status and effectiveness of the QMS at planned intervals to assure its continued suitability, adequacy, and effectiveness.
- b) This review will including assessing opportunities for improvement, and/or the need for changes to the Quality Policy, the Quality Manual, or process procedures.
- c) Records of Leadership reviews will be retained.

#### 3.7 Company Procedures

- 3.7.1 RES Americas controls its work processes through the use of documented procedures.
- 3.7.2 The RES Americas Quality Management procedures (USQM) provide instruction for quality processes applicable to all RES Americas employees regardless of title or function within the company.
- 3.7.3 Within each functional department at RES Americas, procedures are also used to define and control to the extent appropriate, the departments own quality processes, documentation, and records.

#### 3.7.4 QMS Procedures

a) Below is a list of the USQM procedures in use at RES Americas. At RES Americas, the "Quality Manual" has been understood to comprise all USQM procedures by reference.

Document Title	Reference Number	Applicability
USQM - 001 RES Americas Quality Policy	01478-000284	All departments
USQM - 002 Company Scope, Structure, Organization & Profile	01478-000285	All departments
USQM - 003 Authorities & Responsibilities	01478-000286	All departments
USQM-005 Auditing Procedure	01478-000017	All departments
USQM-006 Contract Review	01478-000046	As appropriate
USQM-007 Control of Documents	01478-000041	All departments
USQM-008 Preparation and Issuance of a RES Americas Procedure	01478-000759	All departments

HSQE PROCEDURE		
TITLE:	DOC No: 01478-000692	REV No: 02
RES Americas Quality Manual	PAGE: 18 of 19	DATE: 06/04/15

USQM-011 Corrective/Preventive Action & Control of Non-Conformance	01478-000043	All departments
USQM-012 Education & Training	<u>01478R00006</u>	HR and Management
USQM-013 Management Systems Communication	01478-000289	HSQE and Management
USQM-014 Client Satisfaction and Performance Measurement	01478-000015	As appropriate
USQM-015 Calibration of Measuring & Testing Equipment	01478-000045	As appropriate
USQM-018 Management Review	01478-000292	Management

## 3.7.5 Departmental Procedures

a) These are controlled by the respective functional departments. These procedures define work of the department, but can also define how any staff member must work to the RES Americas standard for that function. Below is a list of functional departments within RES Americas.

Development	Technical
Engineering	Human Resources
Construction	IT (Group Business Systems)
Procurement	Legal
Operations (Generation)	Finance & Accounting
HSQE	Corporate Affairs / Marketing

### 3.8 Company Organization Chart

HSQE PROCEDURE			
TITLE: DOC No: 01478-000692 REV No: 02			
RES Americas Quality Manual	PAGE: 19 of 19	DATE: 06/04/15	

