Annex 4. Traffic Control Management Plan

The purpose of this management plan is to ensure that construction of the Scheme components does not adversely affect road users and other sensitive receptors. This Traffic Control Management Plan (TCMP) therefore identifies the potential impacts and appropriate measures to mitigate them.

Prior to the commencement of construction, the contractor(s) shall use the TCMP as the basis for undertaking a detailed Traffic Assessment (TA) and preparing a detailed TCMP; this will identify specific measures to mitigate any predicted impacts. The contractor's (or contractors') TCMP shall include detailed procedures that demonstrate how the impacts of traffic on communities have been taken into consideration. The contractor(s) shall develop and submit:

- procedures at the start of the construction phase; and
- detailed project-specific procedures that specify how the requirements of their TCMP will be implemented to the satisfaction of the appropriate traffic authorities.

The contractor(s) shall regularly update their TCMP as the construction method is developed and vehicle movement and timing requirements are identified in detail. The contractor(s) shall consult with the relevant government agencies to identify where Project plans can complement existing road development plans at the district and provincial level. The contractor(s) will also consult with the leaders of any communities that will suffer a significant increase in traffic in order to identify alternative routes where possible, or appropriate mitigation measures.

The contractor(s) will:

- identify those responsible for carrying out and managing the procedures;
- reference the procedures and activities the contractor(s) will develop and implement:
- identify work to be undertaken on the roads prior to construction activities to upgrade or stabilize the roads if necessary;
- identify the routes that will be used with the estimated numbers of traffic movements, speeds and times of travel;

- justify where a route has to pass through residential areas and the measures that will be used to ensure the safety of the community and minimize the nuisance impact of traffic movements;
- identify how existing road development plans have been taken into account in the identification of routes and road restoration measures;
- identify the program of road restoration measures that are likely to be required post construction;
- address how the Contractor(s) can reduce the exposure of vehicle drivers, their passengers and other road users from the hazards of road-related accidents;
- identify (and adopt to the maximum extent feasible) all reasonably practicable alternatives to road transportation in order to reduce the number of trucks on the roads; and
- provide details of audits and reviews of the components of the project transport system.

Table 1.Traffic Control Management Plan.

_	
Issue	Mitigating/Monitoring Activity
Access to	
construction areas	location of the access road that will be constructed specifically for the
construction areas	Scheme:
	 environmentally sensitive areas; and
	pedestrians.
	Other measures for mitigating the impact of access roads are as follows:
	Access will be via specified routes, which will be agreed with the
	relevant authorities.
	 Existing, upgradeable roads will be used where practicable, to avoid
	the need to construct new roads.
	Access roads to previously inaccessible sensitive areas will be avoided.
	If the Contractor requires additional routes, a specific proposal will
	be submitted to the relevant authorities, if required, for consideration
	and approval.
	Suitable measures will be implemented to avoid damage to public
	roads and any damage will be repaired to an equal or better
	standard in a timely manner.
	The Contractor will remove all temporary roads or road
	enlargements, except where local communities or landowners
	request that a new road be left in place.
	Temporary access roads will be kept free from deposits to prevent
	silt, or other materials from entering drains or watercourses. Access
	routes to be used by construction traffic will be properly signposted.
	This shall be sufficient to prevent vehicles from leaving the
	designated routes and ensure that the appropriate speed limits are
	enforced particularly through residential areas.
	Access and site roads will be maintained in good condition.
	Temporary roads will be removed when no longer needed and will

	 be reinstated. All damage to existing roads will also be reinstated. Any additional routes will be selected to avoid ecologically sensitive
	areas, and to minimize erosion.
	 The Contractor will liaise with the appropriate regulatory authorities to gain approval to use, and regularly inspect, the road infrastructure.
Routing of	 Relevant authorities will be consulted to agree on specific routes for use by construction traffic to avoid any sensitive residential areas
construction traffic	and unsuitable parts of the road network.
	 Precautions will be taken by the Contractor to avoid damage to the public highways used by vehicles or other items of equipment. Timber mats, tyres or steel plates will be laid as necessary, in particular under tracked equipment. Any road damage will be repaired.
	 Advance warning will be given of any proposed road diversions and closures.
	 The Contractor should consider whether to use buses to transport workers to the construction site.
	 The Contractor will comply with all statutory vehicle limits (width, height, loading, gross weight) and any other statutory requirement.
Temporary traffic	 Traffic flows will be timed, wherever practicable, to avoid periods of heavy traffic flow along main roads.
control and	 In addition, the Contractor will not commence any work that affects
management	the public highway until all agreed traffic safety and management measures essential for the works are accepted and agreed with the relevant authorities.
	 In terms of traffic control, vehicles will be prohibited from reversing unattended into the construction site. Vehicles and plant shall enter and exit the site in a forward direction, as far as possible. In addition, the Contractor will ensure that all heavy goods vehicles are equipped with audible reversing alarms.
	 Clear signs, flagmen and signals will be set up where necessary. Where temporary traffic signals are required, the details and locations of the signs shall be discussed with the relevant authorities. The signs will be fixed safely and securely to ensure that they do not become detached or dislocated, and will be visible and comprehensible by all. The Contractor will also carry out maintenance checks to clean and rescuer signs if necessary. Appropriate supervision will be provided by the Contractor to control the flow of traffic when machinery needs to cross roads.
	 Liaison with the police and other authorities will occur prior to the movement of any abnormal loads. In particular, liaison with the relevant Highway Authority will occur prior to transportation on major highways and motorways.
	 Access to commercial and residential properties shall be maintained and speed limits will be established and enforced over all construction traffic routes.
	 Where roads used by children to reach schools are used by construction traffic, road safety education will be provided at schools. Vehicle traffic will be prohibited during hours that children are travelling to and from school.
	Ambulances and fire services will be consulted regarding road diversions. Road diversions will not increase the response time of
	 these services to local communities. Access to residential and commercial properties will be maintained.
	 If road closures are required, diversions will be planned and communicated to the authorities (including emergency services and public transport providers) and affected communities in advance (via

	the pre-construction community meeting) and will be properly
	signposted. Crossing for pedestrians and animals will be provided to avoid the need for a diversion. No diversion will be permitted that prevents a public transport service from continuing or requires a diversion of more than 1km for vehicles or a diversion of more than 500m for pedestrians or livestock. Notification periods for road closures are as follows: o two weeks minimum notice on closure of up to 28 days;
	 one month minimum notice on closure of 28 days to three months; o threemonths notice for closure over three months or for
	permanent closure.
	 Education on traffic safety will be provided by the Community Liaison Officer(s) (CLOs) to communities not normally subjected to major infrastructure construction.
	 Fuel use will be minimized during the transportation of construction materials and personnel. A fuel use assessment will be undertaken, in conjunction with safety assessments, at the outset of the construction program.
	A 30km/h speed limit shall be established and enforced over all roads on site.
Parking facilities	Signposted, parking facilities shall be provided at accessible locations on the road network.
	The Contractors will ensure that part of the Construction Site is set aside for the parking of emergency service vehicles. The Contractor is expected to make provision for a dedicated parking area on the construction base for the private vehicles of construction personnel.
Maintaining	The Contractor is expected to keep highways free from mud and
Highways	dust and to ensure that no vehicle or other items of equipment leaving the construction base or working width, deposit soil, debris or rock on public highways or public right of ways.
	 Measures will be implemented to ensure that the transport of mud and dust from the site onto public highways and roads is limited. Such measures may include: paving the access road; and
	the use of hard-core surfaces on access roads.
	 the provision of an easily cleaned hardstanding area within the construction site for vehicles entering, parking and leaving.
	 the appointment of site personnel to clean the construction hardstanding area and to remove any mud or debris deposited on the public highways;
	the provision to clean hardstanding areas and to clean any mud or debris deposited by work vehicles on roads or footways in the vicinity of the construction site;
	fully sheeting all works vehicles carrying potentially dusty material or likely to deposit loose materials on the public highway during transit;
	the Contractor shall clean and maintain temporary and permanent
Road Related	roads, and shall remove mud and debris from public roads. Hazards to personnel associated with vehicle transportation, both on- and
Accidents	off-road, will present one of the most significant risk exposures of the
	Project. Accordingly, the Contractor shall be expected to develop and implement management systems and procedures that will provide the
	highest level of control over these hazards. Accordingly, the Contractor's
	procedures shall specifically cover arrangements for the following important aspects:
	the source of and number of qualified drivers required;
	training and approval requirements for drivers;

- hours of driving and rest periods;
- security arrangements for drivers, vehicles and loads;
- arrangements for driver communication with control points and vehicle equipment;
- language/communication issues;
- the source of suitable vehicles (e.g. quality and specification);
- the number of vehicles required;
- the program for preventative vehicle maintenance;
- vehicle routes, route planning and alternative routes;
- overall vehicle movements;
- procedures for the emergency recovery of vehicles;
- an appraisal of the social impact of vehicles in the local community;
- procedures for spot checks and audits of the transport system and for reporting problems.
- pre-use vehicle inspections shall be completed and recorded on the approved form;
- all drivers shall be trained and evaluated in defensive and off-road vehicle operation.

Vehicle Standards and Maintenance

The Contractor shall comply with all other aspects of the Construction Health and Safety Management Plan, which include requirements for vehicle standards and maintenance. The contractor shall also ensure that:

- All vehicles shall be maintained so that their noise and emissions do not cause nuisance to workers or local people.
- New vehicles: vehicles/equipment purchased 'as new' after contract award shall comply with the appropriate emission standards in force on the purchase date.
- Older vehicles: vehicles/equipment not purchased 'as new' after contract award shall be maintained so that noise and emissions levels are no greater than when the vehicle/ equipment was new.

The contractor shall produce method statements, as part of their TCMP, to cover routine maintenance and to minimize equipment emissions. Routine maintenance shall be to a high standard to ensure that vehicles are safe and that emissions and noise are minimized. Method statements shall require regular maintenance of diesel engines to ensure that emissions are minimized, for example, by cleaning fuel injectors.

Annex 5. Risk Assessments

Assessments will take into account environmental as well as health and safety hazards and will include area and task-based assessments. They will be performed by trained staff and each hazard will be considered in the context of its effect upon the activities regarding:

- materials/substances;
- equipment;
- the workplace;
- people;
- procedures; and
- the environment.

This risk assessment approach will consider the hazard, harm, potential severity, probability of occurrence, risk rating, control measures and residual risk. These assessments will also detail action dates and be reviewed on a regular basis. Table 2 presents the Accidents Risk Assessment Management Plan.

Table 2.Accidents Risk Assessment Management Plan.

	Risk				Assessing the Risk	
Hazard	Receptor	Pathway	Managing the Risk	Probability of Exposure	Consequence	What is the overall risk
			Fuel Handling			
Spillage of diesel	• Soil	Storage tank leak or	Training of staff;	Unlikely	Ground contamination	Not significant
	• Air	transfer spill	 Impervious surfaces; 			
	 Groundwater 		 Routine operator checks; and 			
			Clean up response team.			
Air Pollution Control						
Flue gas leak	• Air	Overpressure, material	 Design and fabrication standards; 	Very unlikely	Release of toxic combustion	Not significant
		defect,	 Inspection and maintenance program; 		products to plant enclosures and	
		corrosion/erosion	 Controls and alarms for pressure; 		potentially to atmosphere or via	
			 Continuous emission monitors; and 		stack	
			 Prompt shutdown of equipment. 			
Leak/ spill of water	 Groundwater 	Storage container leak	 Training in unloading practices 	Very unlikely	Potential for contamination of	Not significant
treatment chemicals		or transfer spill	 Design standards 		groundwater	
			 Impervious surfaces 			
Power Generation System	Ä					
Leak of ion	• Air	Storage container	 Bunded storage vessels; 	Very unlikely	Potential contamination of soil,	Not significant
exchange	• Soil	leak or transfer	 Routine inspection and maintenance 		groundwater and surface water,	
regeneration	 Groundwater 	spill	program;		and release of HCl fumes	
chemicals	 Surface 		 Minimum of flanged connections; 			
(NaOH, HCI)	Water		 Tanks fitted with high level alarms; 			

			Response procedure			
			 Fire detection and fire protection systems 			
			Routine operator checks			
			Design standards			
			 Minimum of flanged connections 			
Moderate	products		Oil collector installed	Source		oil leak
Slight	toxic combustion	Very unlikely	 Use of fire-proof lube oil 	Oil leak plus ignition	Air	Fire from ignition of lube
			Emergency Plan			
			 Equipment within concrete structure 			
			 Fire detection and fire protection systems 			
			emergency shutdown valves	or vibration		
	elsewhere in the power plant		 Vibration sensors, isolation valves, 	fabrication defect		
	consequences through damage		 Inspection and maintenance program; 	erosion,		
Moderate	causing further adverse		 Implementation of correct codes of practice; 	corrosion/		failure
Slight	Disintegration of the turbine,	Unlikely	 Specification of equipment; 	Material defects,	Equipment	Turbine equipment
						mechanical failure
			Routine operator checks.			machinery or
			 Anti-vibration mountings; 	Vibration		balance rotating
Not significant	Transmitted vibration	Very unlikely	 Alarm and shutdown systems; 	Transmitted	Installation	Vibration from out of
			deliveries/unloading operations.			
			 Size of deliveries to reduce number of 			
			 Training in unloading practices; 			
			 Localized catchment volume; 			
			 Impervious operational areas indoors; 			
			Design standards;			

	groundwater and			delivery; leak due	Groundwater	for starter
Not significant	Potential soil,	Very unlikely	 Secondary containment for delivery and 	Spill during	Soil	Leak of diesel
			Response procedure			
			 Firefighting systems 			
			 Limited sources of ignition 			
	consequential events		 Routine operator checks 			
	atmosphere; potential of		 Impervious operational areas 			
	po		 Design standards 			leak
Moderate	released to plant		 Minimum of flanged connections 	leak	Plant	ignition of gas
Slight -	Smoke, toxic combustion	Very unlikely	 Bunded storage tanks 	Ignition of gas	Air	Fire from
						Furnace/Boiler
			Minimum of flanged connectionsControls and alarms for pressureRoutine operator checks			atmosphere
			 standards for steam systems 	and connections	Visual	plant building/
Not significant	Noise and visible plume at leak	Unlikely	Statutory design, fabrication and inspection	Faulty boiler tubes	Noise	Steam leak to
			 Effluent drains isolate the area 			
			 Impervious surfaces indoors 			
			Program.			
			 Routine inspection and maintenance 			
			 Routine operator checks 		Surface Water	equipment
	contamination		 Design standards 	vibration	Groundwater	from steam turbine
Not significant	Potential fire and groundwater	Unlikely	 Minimum of flanged connections 	Equipment fracture or	Soil	Leak of lube oil/ seal oil

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	groundwater and		storage	refueling, or leaks	Groundwater	vehicle refueling
Not significant	Potential soil,	Very unlikely	 Secondary containment for delivery and 	Spill during delivery or	Soil	Leak of fuel oil/diesel for
						Miscellaneous
			combustion fan			
	atmosphere		 extraction of tipping hall atmosphere by 			
	potentially into		 level detection/alarm in chute 			chute
	tipping hall and		"plug" of waste in chute acting as seal			gases up feed
	products released to		 stack if ID fan stopped 	chute		combustion
Not significant	Combustion	Very unlikely	 suction created by ID fan or suction effect of 	Waste ignition in	Air	Back flow of
				explosion		
	structure damaged		and back loading of rejected feedstock	material; gas		
	from plant if		 Crane operator observation of gas bottles 	flammable		system
	release of flue gases		Operator training.	presence of		in combustion
Moderate	above limits and/or		Boiler design standard	of support fuel;	Plant	surge/explosion
Slight -	Flue gas emissions	Very unlikely	 Combustion control system with interlocks. 	Delayed ignition	Air	Pressure
			kept locked shut.			
			 Discharge point for attenuation ponds will be 			
			 Impervious surfaces indoors 			
			 Design standards 			
			 Minimum of flanged connections 	connections		
			program	pipework		
	contamination		 Routine inspection and maintenance 	tank, burners or	Water	
	surface water		storage	to faulty storage	Surface	burner

	products potentially			motor, cabling		item fire	item
Not significant	Smoke, combusted	Very unlikely	 Design and fabrication standards 	Faulty electric	Air	Equipment/part	Equ
			 Use of spill kits 				
			the control of hazardous substances				
			 Storage in accordance with requirements of 				
	water/groundwater		 Designated storage areas 	or spillage during use	water		
	soil, surface		 Bunded area for tanks 	containers in storage	water Ground	materials	mat
Not significant	Contamination of	Unlikely	 Store only small quantities of materials 	Leakage from	Soil Surface	Spillage of raw	Spil
			emergency plan.				
			 Have a fire detection system and an 				
			 Permit-to-work system 				
	contaminated firewater		 Enforce no smoking rules 				
	potential for release of		materials				
	groundwater; also		 Only store relatively small amounts of 				
	soil, surface water or		Fire hose nearby		Ground water	vent	solvent
	subsequent contamination of air,		 Training regarding fire hazards 		Surface water	such as paints and	sucl
	combustion products and		 Notices and training regarding fire hazards 	combustion products	Soil	flammable materials	flam
Not significant	Major fire with emission of toxic	Very unlikely	 Fire precautions 	Emission of toxic	Air	Fire in stores containing	Fire
			 Oil water interceptors on drainage system 				
			 Impervious surfaces outdoors 				
			 Design standards 				
			 Minimum of flanged connections 				
			alarms				
			 Storage Tank fitted with high level and leak 				
	contamination		Program.				
	surface water		 Routine inspection and maintenance 		Surface Water		

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				contamination	Firewater				
	Water	Ground	Water	Surface	Air				
				containment	Ineffective				
					firewater				
		Drainage arrangements to waste water tank.	Containment in bunker	impervious surfaces	Containment within plant area with	Response procedure	 Fire detection systems and fire hoses 	Routine operator inspection	 Inspection and maintenance program.
					Very unlikely				
groundwater	potential for contamination of	water system;	through uncontaminated surface	controlled water by run off	unlikely Potential contamination of Not significant			atmosphere	released into the
	า of		rface	off	of Not signif				

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Annex 6. Mine Status of Project Site

Unofficial Translation of the Letter

Date: November 05, 2018 Afghanistan National Disaster Management Authority Directorate of Mine Action Coordination (DMAC)

To Bayat Power Company

According to the maps and coordinates sent by the Afghan Bayat Power Company, the Project site is located in Khuja Gorger village in Sheberghan city, Jowzjan province. We have not either the surveyed and nor registered in our program database the potential mining areas in the 5 km radius of the Project site so far. Some areas of the jowzjan province has already been cleared of the mines in the last years.

Since Sheberghan city also suffered during the wars during the past years, it is advised that all construction companies, prior to planning stage, clean the areas of mines through one of the registered companies with us.

Please don't hesitate to contact us at 0708606060 if you observe or come across any suspicious objects.

Regards,

Islamic Republic of Afghanistan Office of the State Minister for Disaster Management and Humanitarian Affairs



د افغانستان اسلامی جههوریت دفتر وزیر دولت در امور رسیده گی به حوادث

اریخ| Date: ۱۳۹۷ / ۱۳۹۷

ادارہ ملی آمادہ گی مبارز دیا حوادث Afghanistan National Disaster Management Authority ریاست انسجام و همآهنگی تطهیرماین Directorate of Mine Action Coordination (DMAC)

شعاره فيت REF : ۲۰۱۸ - ۲۰۱۸

به شرکت محترم بیات پاور ا

به اساس مکتوب شماره (۱۹/۸۷ الی ۵۹/۱۳۰ مورخ ۱۳۹۷/۸/۵ ریاست محترم خدمات تخنیکی وسکتوری ولایت جوزجان و مکتوب شماره ۴۴/۱۲ مورخ ۱۳۹۷/۸/۲ و درخواست تیم سروی شرکت بیات پاور نگاشته منشود:

قرار مالحظه نقشه و کوردینات ارسائی شرکت محترم بیات پاور ساحه مورد نظر در مربوطات قریه خواجه گوگردک، شیرغان مرکز ولایت جوزجان موقعیت دارد. درساحه متذکره و محدوده پنج کیلومتری اطراف آن فعلاً ساحه ملوث با ماین و مواد منفجر ناشده باقیمانده از جلگ شناسایی، سروی وثبت پانک اطلاعاتی پروگرام ماین پاکی نشده است. بعضی از قسمت های نواحی مرکز ولایت جوزجان طی سالهای قبل توسط پروگرام ماین پاکی افغانستان سروی واز وجود ماین ها ومواد منفجرناشده پاکسازی گردیده است.

ازینکه شهر شبرغان، نواحی اطراف آن، ودر مجموع ولایت جوزجان طی سالهای متمادی شاهد جنگ ونزاع های داخلی وخارجی بوده است، درصورت اعمار تأسیمات وکند نکاری زمین توسط بست ویا ماشین توصیه میگردد تاعموم شرکت های ساختمانی قبل از پلانگذاری ساحه را توسط یکی ازموسسات راجستر شده ماین پاکی چک نماند

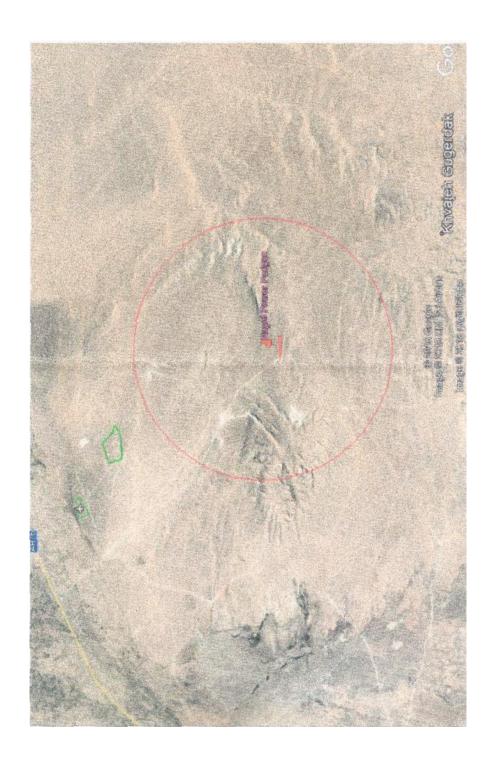
و همچنان احتراماته خواهش میگردد تا در موقع مواجه شدن با اشیای مشکوک ساحه را مسدود نموده و این اداره را از طریق ۷۰۸۴۰۶۰۰ در جریان بگذارید.

> بالحترام محمد ابراهیم ستانکزی مسول نفتر ساحوی زون شمال

Address: Setingst equare, next to Bank Aftelsis, Kebul- Afghanistan الزائر جهاراً أهي سفار تناصوال بلنك قلاح كثال الفلائين الجزر معد الفق يوعلي- رئيس لصحيم و مساطري علهي المساوري عليه المساوري عليه و المساطري عليه المساوري عليه المساوري المساوري المساوري عليه المساوري المساوري المساوري المساوري المساوري المساوري المساوري المساوري المساورين الم

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Annex 7. Yatimtaq Gas Laboratory Report

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LABORATORY REPORT

REPORT NO:- IDI-1008-2018-R0

					EFORT 140:- 1DL-1008-2018-ND
Sample No.	:	IDL/1008/2018	Customer Name	:	BAYAT POWER
Lab Job No.	:	DXB-TBA	Customer Address	:	BAYAT POWER, AFGANISTAN
INSP No.	:	NA	Sampling Date / Time	:	13.02.2018 / 03:15 PM
Product Grade	:	NATURAL GAS	Sample Received on	:	07.03.2018
Gas Temperature	:	73°F	Analysis Conducted on	:	07-13.03.2018
Source	:	Out Let	Reporting Date	;	14.03.2018
Sample Condition	:	Good	Sampled By	:	Client
Pressure	:	61 BAR-860 pSi	Terminal	:	NA
Sample Reference	:	Amine Plant Outlet Gas.			

TEST	METHOD	UNITS	RESULTS
Methane	ASTM D1945	% mol.	98.73
Ethane	ASTM D1945	% mol.	0.47
Propane	ASTM D1945	% mol.	0.05
Iso-Butane	ASTM D1945	% mol.	0.01
n-Butane	ASTM D1945	% mol.	0.01
Neo-Pentane	ASTM D1945	% mol.	<0.01
Iso-Pentane	ASTM D1945	% mol.	<0.01
n-Pentane	ASTM D1945	% mol.	<0.01
Hexane (C6)	ASTM D1945	% mol.	<0.01
Heptane (C7)	ASTM D1945	% mol.	<0.01
Octane (C8)	ASTM D1945	% mol.	< 0.01
Nonane (C9)	ASTM D1945	% mol.	<0.01
Decane (C10)	ASTM D1945	% mol.	<0.01
Nitrogen	ASTM D1945	% mol.	0.24
Carbon Dioxide	ASTM D1945	% mol.	0.49
Hydrogen	ASTM D1945	% mol.	< 0.01
Carbon Monoxide	ASTM D1945	% mol.	<0.01
Oxygen	ASTM D1945	% mol.	< 0.01
Hyd rogen Sulphide	ASTM D1945	% mol.	< 0.01
Total Sulphur	ASTM D6228	ppm mol.	>14 *
Mercaptan Sulphur	ASTM D6228	ppm mol.	>14 *

Page 1 of 2

NOTE: Precision parameters apply in determination of above results and test method. Also refer to ASTM D 3244 &IP Standard methods Ap.E utilization of test data to determine conformance with specification. The derived test results are only applicable to the samples(s) as received and identified as above. The report shall not be reproduced except in full without the written approval of inspectorate Dubai. All our services are undertaken as per our standard terms and conditions of business, a copy can be provided upon request.

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LABORATORY REPORT

ASTM D3588 MJ/Sm3 37.7 Net Calorific Value	TEST	METHOD	UNITS	RESULTS
Net Calorific Value	Relative Density @ 15/15°C,air=1	ASTM D3588	-	0.564
Water Vapor Content of Gaseous Fuels Karl Fischer ppm wt 3 Particle Count ISO 4406 ISO 4406 <td< td=""><td>Gross Calorific Value</td><td>ASTM D3588</td><td>MJ/Sm3</td><td>37.7</td></td<>	Gross Calorific Value	ASTM D3588	MJ/Sm3	37.7
Particle Count ISO 4406 SO Code G/5/1	Net Calorific Value	ASTM D3588	MJ/Sm3	33.9
SO Code Code 6/5/1 Metals	Water Vapor Content of Gaseous Fuels	Karl Fischer	ppm wt	3
Metals Iron Copper Calcium Copper Calcium Copper Calcium Copper Calcium Ca	Particle Count	ISO 4406		
Iron Copper Cop	ISO Code		Code	6/5/1
Copper C	Metals			
CP-OES Magnesium CP-OES Magnesium CP-OES Magnesium CP-OES C	Iron			<1
Aluminum Tin Chromium Nickel Titanium Vanadium Silver Cadmium Manganese Calcium Magnesium Phosphorus Zinc Molybdenum Boron Barium Silicon Sodium	Copper			<1
Tin Chromium Nickel Titanium Vanadium Silver Cadmium Manganese Calcium Magnesium Phosphorus Zinc Molybdenum Boron Barium Silicon Sodium	Lead			<1
Chromium	Aluminum			<1
Nickel Titanium Vanadium Silver Cadmium Manganese Calcium Magnesium Phosphorus Zinc Molybdenum Boron Barium Silicon Sodium	Tin			<1
Titanium	Chromium			<1
Vanadium Silver Cadmium KCP-OES Mg/L Silver	Nickel			<1
Silver Cadmium KCP-OES mg/L <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1	Titanium			<1
Cadmium	Vanadium			<1
Manganese Calcium Magnesium Phosphorus Zinc Molybdenum Boron Barium Silicon Sodium mg/L <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1	Silver			<1
Calcium Calc	Cadmium	ICP-OES		<1
Magnesium <1	Manganese		mg/L	<1
Phosphorus Zinc Molybdenum Boron Barium Silicon Sodium <1 <1 <1 <1 <1 <1 <1 <1 <1 <	Calcium			<1
Zinc <1	Magnesium			<1
Molybdenum <1	Phosphorus			<1
Solition Control Con	Zinc			<1
Sarium	Molybdenum			<1
Silicon <1 Sodium	Boron			<1
Sodium <1	Barium			<1
	Silicon]		<1
Potassium <1	Sodium	7		<1
	Potassium	7		<1

Remarks: - Total Sulphur & Mercaptan Sulphur results are above the detection limit of the test method. (Obtained Sulphur Content in the analysis is 53 ppm md & Mercaptan Sulphur is 78 ppm mol)

> George Idicula (Laboratory Manager)

Approved By

Page 2 of 2

NOTE: Precision parameters apply in determination of above results and test method. Also refer to ASTM D 3244 &IP Standard methods Ap.E utilization of test data to determine conformance with specification. The derived test results are only applicable to the samples(s) as received and identified as above. The report shall not be reproduced except in full without the written approval of inspectorate Dubai. All our services are undertaken as per our standard terms and conditions of business, a copy can be provided upon request.

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Annex 8. Stakeholder Engagement Records

NO	Position	Name	Directorate	Contact Number
1	President	Sayed Milad Sajadi	Education	0790422006
2	Vice President	Sayed Aref Baqeri	Refugees and Repatriations	0744228718
3		Sayed Jamaluddin	DABS	0784509486
4		Mohammad Yousuf	Municipality	0784509486
5		Borhanuddin	Urban Development and Housing	0794341274
6	Member	Mohammad Rafie	Environment Protection	0782182938
7	Wernber	Abdul Ghafar Ahmadi	Provincial Governor,	0788146610
8		Akhtar Mohammad Fayzi	Information & Culture	0799011966
9		Afizullha Qudrat	Provincial Council.	0788869080
10		Eng. Jawid	Mines and Petroleum	0781310033
11		Abdul Ghafar Kuyak	Bayat Power Company	0702935333



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	Local Grievance Redress Committees (Men Local GRCs)										
No	No Position Name Father Name Phone Number										
1	President	Mohammad Alem	Abdul Karim	0787501536							
2	Vice President	Saleh	Buman Ali	0747011720							
3		Haji Lal Mohammad	Abdul Khalil	0787923571							
4	Members	Mohammadullah	Ishagh	0767056470							
5		Abdul Ghafar Kuyak	Abdul Khaleg	0702935333							

	Local Grievance Redress Committees (Women Local GRCs)									
No	lo Position Name Father Name Phone Number									
1	President	Andira	Mehrabuddin	0787862480						
2	Vice President	Zia jan	Dad Mohammad	0731742261						
3	Member	Zarmina	Abdulrahim	0731770768						

ـ شهر شيرغان	جسهوری اسلامی الحقصنتان و لایت جوزجان- شهر شیر غان پروژه برق بیفت								
ع شكيك	كموته سمع شكفيات								
پروژه برق بیفت	ننم پروژه								
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الثنای کفر پروژه، در صورت بروز مشکلات اجتماعی و									
ئىلىن 25 <u>3</u> 43.5 <mark>70 يىن ئىلىد</mark> خاصىل ئىلىيە.	دا، اهستانی دورای طوری منصوطیت داریا در داشتن کو پرورو به دار صورات پرور هستند است. با در مصورات پرور هستند است. در مصورات پرور در دار طریق راه از در ارتباطی مصورات پروره دار طریق راه از در								
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	Civil Society FGD								
	Date Start time of interview		End of interview	Place of interview	Province	District			
	tober 13, 2018	1:40PM	3:10PM	Information and culture Directorate	Jawzjan	1			
NO	NO Name		Job Title	Gender	Age	Contact Number			
1	Abdulmana	an Farwand	Bakhtar Agency	Male	60	0799104147			
2	Moh Rasul	Danish	Manager at Radio Armaghan	Male	30	0780662940			
3	Abdul Mati	n Sadid	Manager of PAFCO program	Male	29	0781880091			
4	Haji Ali Ent	izar	Head of Civil Society Institutions	Male	40	0787535777			
5	Sultan Hus	sian Sultani	Student	Male	25	0748590900			
6	Akhtar Mol	nammad	Civilian Activist	Male	34	0799011966			
7	Nooria		Manager at Male TV	Female	48	0787148801			
8	Anjela Dad	war	University professor	Female	35	0799124887			
9	Mahboba		Civilian Activist	Female	20	0783292363			
10	Shakira		Government staff	Female	40	0786721162			



	University Students FGD									
	Date Start time of interview		ate End of interview		Province	District				
24-	-10-2018	12:10 PM	1:00 PM	University of Jawzjan	Jawzjan	1				
NO	ı	Name	Job Title	Gender	Age	Contact Number				
1	Habiba		University Students	Female	23	0786242318				
2	Nooria		University Students	Female	21	0780362521				
3	Farmela		University Students	Female	22	0789500443				
4	Madina		University Students	Female	19	0785577294				
5	Semin		University Students	Female	21	0788224027				
6	Enayatullal	h	University Students	Male	21	0780525337				
7	Nawabudir	1	University Students	Male	20	0787947091				
8	Azizullah		University Students	Male	21	0795465155				
9	Abdulbasir		University Students	Male	21	0782347011				
10	Mohamma	dullah	University Students	Male	25	0767056470				



	Refugees and Repatriations FGD									
С	Date	Start time of interview	End of interview	Place of interview	Province	District				
26-1	0-2018	3:00 pm	3:45 pm	Jawanan Rawshangar office	Jawzjan	3				
NO	NO Name		Job Title	Gender	Age	Contact Number				
1	Jamshed	l	Shopkeeper	male	24	0706498825				
2	Shukrulla	aah	Worker	male	28	0786020300				
3	Noor Mol	hammaad	Toiler	male	70	-				
4	Faisal		Student	male	20	0780479094				
5	Jabar		Student	male	21	0788679919				
6	Amenah		House wife	female	28	0731767890				
7	Latifa		House wife	female	45	0787208197				
8	Asifa		House wife	female	100	-				
9	9 Naz		House wife	female	24	-				
10	Hora		House wife	female	63	-				
11	Neda		House wife	female	32	-				



	University Professors FGD								
[Date	Start time of interview	End of interview	Place of interview	Province	District			
28-1	10-2018	12:00 pm	1:00 pm	University of Jawzjan	Jawzjan	1			
No.	No. Name		Job Title	Gender	Age	Contact Number			
1	Enay	atullah Hamidi	University professor	Male	25	0781998535			
2	Saye	ed Hesamudin	University professor	Male	27	0785105017			
3	F	layratullah	University professor	Male	30	0782536503			
4	Sayed	l Ahmad Khalid	University professor	Male	27	0782561543			
5	Anj	ilah Dadwar	University professor	Female	35	0788844812			
6	Oı	mid Ahmad	University professor	Male	28	0788847422			
7		Saifullah	University professor	Male	27	0788915589			
8	Abdı	ul Jabar Saqif	University professor	Male	28	0784381546			
9	Hemasah Eftikhar		University professor	Female	39	0780320255			
10	Khodidad Mahmodi		University professor	Male	30	0786052969			
11	Ме	hdad Esmail	University professor	Male	32	0786250825			
12	Abdu	ılnasir Jawhar	University professor	Male	40	0785623685			



	Chiefs, Elders and Alley representative FGD									
	Date	Start time of interview	End of interview	Place of interview	Province	District				
30	-10-2018	11:20am	12:10pm	The home of secretary head	Jawzjan	Sofi Qala village				
No.	o. Name		Job Title	Gender	Age	Contact Number				
1	Haji Lal Mo	ohammad	Head of Naw Abad village	Male	50	0787923571				
2	Mohamma	d Alim	Council Secretary	Male	35	0787501536				
3	Mohaammad Nabi		Head of Sofi Qala village	Male	60	0783476229				
4	Faqer Moh	ammad	Head of village	Male	78	-				
5	Haji Najibu	ıdin	Local leader	Male	75	-				
6	Mohamma	d Nazar	Head of Turkman Abad village	Male	41	0789750143				
7	Jalaludin		Secretary of local Council	Male	38	0780309946				
8	Khirmohan	nmad	Head of Secretary	Male	54	0784765269				
9	Sale Mohammad		Financial officer of the secretary	Male	48	0772465157				
10	Abdullah	<u> </u>	Head of people	Male	71	-				
11	Haji Achil		Head of people	Male	63	0788767808				
12	Haji Hamio	lullah	Head of Chehel mard village	Male	45	0780428624				



	House Wives FGD									
	Date	Start time of interview	End of interview	Place of interview	Province	District				
23-	10-2018	3:00 PM	4:00 PM	Home of participate	Jawzjan	2- Mirwis menah				
No.		Name	Job Title	Gender	Age	Contact Number				
1	Zia jan		House wife	Female	25	0731742261				
2	Sherin jar	1	House wife	Female	35	0711070290				
3	Wida		House wife	Female	24	0786711370				
4	Nazri		House wife	Female	38	-				
5	Shamafro	z	House wife	Female	32	0702700847				
6	Shukria		House wife	Female	26	0730469064				
7	Shakila		House wife	Female	35	-				
8	Zainab		House wife	Female	27	-				
9	Mawloda		House wife	Female	26	0729697936				
10	Lema		House wife	Female	33	-				



	Employed Women FGD									
Date		Start time of interview	End of interview	Place of interview	Province	District				
25-	10-2018	7:00AM	7:50AM	Home of participate	Jawzjan	1				
No.		Name	Job Title	Gender	Age	Contact Number				
1	Mahdia		Baker	Female	35	0782365892				
2	Shahnaz		Tailer	Female	19	0711070290				
3	Terena		Doctor	Female	30	0799164949				
4	Frishta		Tailer	Female	19	-				
5	Zia jan		Radio speechify	Female	28	0731742261				
6	Bi Bi Habil	ba	Needlework	Female	40	-				
7	Marzia		Tailer and Needlework	Female	38	0786148328				
8	Zia		Shearer	Female	18	-				
9	Salma		Shearer	Female	18	0780440471				



Religious Scholars FGD						
Date Start time of interview		End of interview	Place of interview	Province	District	
24-	24-10-2018 10:05 AM		11:00 AM	Haj and Islamic affairs directorate	Jawzjan	1
No.	. Name		Job Title	Gender	Age	Contact Number
1	Mohammad Alim		Orator of Hazrat Omar mosque	male	35	0784801149
2	Abduljabar		Imam of Hazrat Osman mosque	male	38	0783061264
3	Mawlwi Khir mohammaad		Imam of Imam Azam Mosque	male	38	0780115756
4	Khilfa Haji Azam		Orator of Khanqa mosque	male	45	0789016428
5	Saifudin		Orator of Houusin Abad village mosque	male	31	0780776074
6	Ahmad Khan		Imam of Narab shah mosque	male	35	0799123636
7	Abdulsamad		Orator of Imam Tarmzi mosque	male	49	0788743813
8	Mawlawi Abdullah		Imam of Hazrat Bilal mosque	male	41	0784876837
9	Karamatullah		Orator of Jawhari mosque	male	35	0782463727
10	Shahwali		Orator of Hazrat Hamza mosque	male	47	0788742231



General Public FGD						
Date Start time of interview		End of interview	Place of interview	Province	District	
31	31-10-2018 11:40AM		12:40 PM	Youth Empowerment Center	Jawzjan	1
NO	Name		Job Title	Gender	Age	Contact Number
1	Taqi Sherzad		Radio Sarish employee	male	22	0782075041
2	Hussin Rahimi		Member of social institution	male	23	0731494918
3	Mohammad Haroon		Radio Bustan employee	male	22	0781817101
4	Chargh Ali Behzad		Member of Balkhab student Institution	male	22	0772600907
5	Najibullah Ibrahimi		Member of Ahlubit madrsah	male	21	0747520983
6	Mohammad Rahimi		Memmber of Hamagan Organization	male	23	0775663335
7	Moh Aqa Danish		Head of Samangan Student institution	male	21	0764509508
8	Azizullah Sultani Zada		Imam of Chaharda Masom mosque	male	27	0749423036
9	Saleh Noori		Member of cultural commute	male	24	0747011790
10	Nasiba Aria		Employee of PAFCO	female	22	0789114270
11	Masoma Saydi		Member of Durokhshan institution	female	21	0786380830
12	Asma Rashid		Member of Ahlubit madrsah	female	19	0796665053



	Landowners & Farmers FGD							
Date Starting		g time Ending Time		Place of Interview	Province	District		
26	26-10-2018 10:2)am 11:00am		Home of Deputy council	Jawzjan	3- Hamid Abad village	
No	No Name		Job Title		Sex	Age	Contact Number	
1	1 Ibrahim		Worke	r	male	60	0787880845	
2	Juma Khar	ı	Jobless		male	65	-	
3	3 Haji Abdurahman		Head of village		male	48	0786285994	
4	4 Agha Mohammad		Worker		male	52	0785035043	
5	Rahman Nazar		Worker		male	59	0781884576	
6	Saleh		Worker		male	42	-	
7	7 Khalifa Juma		Farmer		male	40	0782927020	
8	8 Ghayeb Nazar		Farmer		male	41	0786753728	
9	9 Haji Sefudian		Farmer		male	52	0785548025	
10	0 Khan Morad		Farmer		Male	51	0784092676	
11	11 Abdulaziz		Farmer		Male	41	0787675039	
12	2 Naqibullah		Head o	of landowners	male	21	0783827545	





Ministry of Rural Rehabilitation and Development Directorate

Date: November 4, 2018 **Interviewee:** Engineer Mohammad Yousuf



Statistic Organization Office

Date: October 29, 2018 Interviewee: Abdul Matin



Afghanistan Land Authority Office

Date: October 29, 2018 **Interviewee:** Jamaludin Ranjbar



Ministry of Women's Affairs Directorate

Date: October 30, 2018 Interviewee: Waheeda Faizi



Ministry of Commerce Directorate

Date: October 30, 2018 **Interviewee:** Eng. Birdi Sorkhi



Ministry of Agriculture Irrigation and Livestock Directorate

Date: October 29, 2018 Interviewee: Eng. Abdurasheed



NGOs						
No.	Name	Name of Interviewee	Job Title	Date		
1	World Hunger Help (WHH)	Nasrullah Seddiqi	Head of NGO	Nov 8, 2018		
2	Women Association	Fatema Nik Rasul	Head of NGO	Nov 8, 2018		



2:photo

1:photo



Jawzjan Province, Directorates							
No.	Directorate	Name of Interviewee	Job Title	Date			
1	Ministry of Education	Abdulhay Yashin	Head of Directorate	Oct 29, 2018			
2	Ministry of Refugees and Repatriations	Sayed Taleb Sadat	Acting Head of Directorate	Oct 24, 2018			
3	Provincial Municipality	Mohabbatullah Talash	Director of Monitoring and Evaluation	Oct 29, 2018			
4	DABS	Sayed Mansour Pouya	Head of Directorate	Oct 28, 2018			
5	Ministry of Commerce & Industry	Alhaj Allhajullah Birdy Sorkhi	CEO of Chamber of Commerce & Industries	Oct 30, 2018			
6	Ministry of Urban Development and Housing	Mohammad Amin Arkain	Head of Directorate	Oct 29, 2018			
7	NEPA	Hazrat Shah	Head of Directorate	Oct 29, 2018			
8	Land Registration and Coordination - (ARAZI)	Jamalluddin Ranjbar	Record of Results Manager	Oct 29, 2018			
9	Ministry of Information & Culture	Akhtar Mohammad Faizi	General Manager of Youth Affairs	Oct 27, 2018			
10	Provincial Council	Hafizullah Nudrat	Member of Provincial council	Oct 29, 2018			
11	Ministry of Mine and Petroleum	Abdul Salam	General Director of Cadastre	Dec 7, 2018			
12	Ministry of Women Affairs	Wahida Faiz	Head of Coordination of Social and Economic Services	Oct 30, 2018			
13	Ministry of Public Health	Hafizullah Jamshidi	Head of Directorate	Oct 29, 2018			
14	Statistics Organization	Abdul Mateen	Acting Head of Directorate	Oct 29, 2018			
15	Ministry of Public Works	Ataullah Kargar	Head of Directorate	Oct 29, 2018			
16	Ministry of Rural Rehabilitation and Development	Mohammad Yousof Saeed	Head of Directorate	Dec 4, 2018			
17	Disaster Management	Sayed Feyzullah Sadat	Head of Directorate	Oct 30, 2018			
18	Ministry of Labour Social Affairs Martyrs and Disabled	Sayed Abdurrashid Hozuri	Head of Directorate	Oct 31, 2018			
19	Ministry of Agriculture, Irrigation and Livestock Directorate	Abdurrashid	Agricultural Research Manager	Oct 29, 2018			









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Annex 9. Sample of Individual Questionnaire

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کودتاریخ.....تاریخ......

سو النامه انفر ادی پروژه برق بیات ولایت جوزجان



بيوگرافي		
	اسم	1
	سن	2
□ مجرد □ مناهل □ بيوه	حالت مدنى	3
	ولسوالي	4
	قريه/ناحيه	5
	وظيفه	6
	در آمد ماهیانه	7
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	مكان مصاحبه	9
	زمان مصاحبه	10
	شماره تماس(اختیاری)	11
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سوالات اجتماعي		
بیات اگاهی دارید؟	شما از پروژه برق گازی ب	
	🗖 خیر	🗖 بنه
هر شما رضایت بخش است؟	رضعیت فعلی برق، در شو	2- آیا و
🗖 خیر 👚 خیلی کم	🗖 حیلی زیاد	🗖 بله
جند ساعت بر ق دار ید؟ -	در بیست چهار ساعت، ج	3- شما
1 – 20 ساعت 🔲 24 ساعت 🔲 نداریم		
	9 9 00 00 DOI 0	
) شما از کدام منابع تامین . ن شهری (جنراتور)	
	,	
🗖 برق آبی 📗 برق بادی 📄 دیگر	ل سولر (آفتابی)	🗖 بر ق
ضابت دار بد؟	شما از تطبیق این پروژه ر	5- آيا ن
🗖 خیر 🌷 🗖 خیلی کم		



6- این پروژه چه فایده <i>ی بر</i> ای شما دارد؟
🗖 ندارد 👚 نمیدانم
7- این پروژه چه ضرری برای شما خواهد داشت؟
8۔ مردم این منطقه به کدام زبانها صحبت می کنند؟ 🗖 فارسی/ دری 🗖 پشتو 🗖 ازبکی 🗖 دیگر
9- منبع آب آشامیدنی در این منطقه کدام است؟ ا آب نل ا آب چاه ا آب چشمه ا دیگر
01-مردم این منطقه به کدام کار ها مصروف هستند؟ (شغل مردم منطقه چیست؟) □ دهقانی □ نجاری □ مستری □ موتروانی □ ویرینگکاری □ برقی □ نانوایی □ معلمی □ رنگمالی □ دکانداری □ قصابی و
11- آیا فکر می کنید که این پروژه باعث اشتغال و ایجاد فرصت های کاری در منطقه و شهر شما می شود؟ □ بله □ خبر
~
12-بیماری های شایع در این شهر چه بیماری هایی می باشند؟ □ نفس تنگی □ محرقه □ فلج اطفال □ تبرکلوز □ اسهال □ سینه بغل □ سرطان □ دیگر
13- آیا دختران و زنان این شهر می توانند بدون کدام مشکل درس های شان را ادامه بدهند؟ بله 🕒 خیر
14-کدام موانع باعث می شود که خانم ها نتوانند درس های شانرا ادامه بدهند؟ □ سنت ها □ خشونت های فامیلی □ مشکلات اقتصادی □ ازدواج زود هنگام □ نبودن مکتب یا استاد خانم □ دوری مکتب □ ناامنی □ دیگر



لات محیط زیستی	سو ا	
	ع نباتات موجود در منطقه را نام ببرید؟ رختان	1:1- انوا <u>:</u> انواع در
	 پاهان خودرو و بیابانی	انو اع گد
	دارویی و طبی	حیاهان
	🗖 ندار د 👚 نمیدانم	
	ه حیوانات موجود در منطقه را نام ببرید؟ ، خانگی	
	، وحشى	 حيوانات
	······································	 خز ندگار
		ر برندگان
	🗖 ندار د 📗 نمیدانم	
	سوخت مردم این مناطق در فصل گرما چید زغال سنگ چوب گاز برق دیگر سوخت مردم این مناطق در فصل سرما چید	
	زغال سنگ چوب گاز	
	برق دیگر	
ت استفاده می شود؟	ن مناطق، برای پخت و پز از چه نوع سوخ زغال سنگ چوب	1-در ایر [
	گاز	





□ برق
🗆 دیگر
20-از کدام منابع آب، برای آبیاری زمین های زراعتی استفاده می شوند؟ ا آب نل ا آب چاه ا آب چشمه ا آب دریا ا دیگر
21- آیا منابع آب زراعتی این مناطق در فصل زراعت کافی می باشد؟ بله □ خیر
22- برای تطبیق بهتر این پروژه، شما چه پیشنهاداتی دارید؟

Social Questionnaires Bayat IPP Project October 2018

Question	Answer
Name of Enumerator	
Name of Field Supervisor	
Introduction	
Interviewer to introduce himself to the stakeholder and ask for permission to conduct the survey Once they have agreed to partake, please state:	
"This interview is purely voluntary and you are under no obligation to provide information that you do not feel do not want to answer a question, please just state this.	to provide information that you do not feel comfortable with. If you
We appreciate your participation in the survey, and it will help us in understanding the current social and environmental aspects related to the project befor with your assistance."	understanding the current social and environmental aspects related
,	
Basic Information	
Place of Interview	
Date / Time of Interview	
District	
Village / Town	
Please provide me with your name and surname?	
Please provide me with your age?	
Please could you provide me with your telephone number?	
Please tell me what your marital status is?	Single ☐ Married ☐ Widow ☐
Please tell me what your occupation is?	
What level of education do you hold?	Illiterate \Box Primary \Box 12th Grade \Box Bachelor \Box Trade \Box Religious Education \Box

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Social
Before this introduction, have you heard of the Bayat Gas to Power Plant project before? Ask if they want to elaborate on what they have heard about the Project
- □Yes
- □ No
Is the existing electricity satisfied in your town/city?
- □Yes
- □ Very much
- □ No
- □ Very Low
In 24 hours, how many hours do you have electricity?
- 🗆 1-10 hours
- 10-20 hours
- 24 hours
- We don't have
Where do you source your energy from?
- Grid power
- Generator
- Solar
- Wind
- 🗆 Hydroelectric
- Other
Do you agree with implementation of this project?
- 🗆 Yes
- Uery much
- □ No
- 🗆 A little
What is the beneficial of this project?
- □ I don't know

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- Teconomic problems
- □ Family violence
- Tradition
What are the most problem that female cannot studies continuously in your community?
- □ No
- ☐Yes
Are the girls and women studies continuously in your community?
- Others?
- Cancer
- Diarrhoea
- "Hectic"
- 🗆 Typhus
- 🗆 Paralysis
- □Asthma
What illnesses have you observed in the community?
- □No
- 🗆 Yes
Does the implementation of the project will create job opportunities in your community?
What are the most common jobs in your community?
- Other
- Stream
- Fountain
- 🗆 Water Well
- Piped Water
From where do you provide your drinking water?
- Other
- 🗆 Uzbek
- 🗆 Pashto
- 🗆 Persian/Dari
Which languages are spoken in your community?
- □ I don't know
- □ Doesn't have
What is the adverse impacts of this project?

- ☐ Marriage - ☐ Lack of school and female teachers
- Others
Environment in General
What kinds of flora are in the natural areas around us?
- Trees:
- Territorial vegetation:
- Medicinal plants:
- □ Not existed
- □ I don't know
What kinds of fauna are in the natural areas around us?
- Domestic Animal:
- Wild Animal:
- Reptile:
- Birds:
- □ Not existed
- □ I don't know
What cooking fuel do the people usually use in summer time?
- Coal
- 🗆 Wood
- Gas
- Electricity
- Other
What cooking fuel do the people usually use in winter time?
- Coal
- W00d
- Electricity
- Other
What are your current source of water for irrigation?
- Pipe water
- 🗆 Well
- Spring
- River
- Other

|--|

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Annex 10. Sample of FGD Questionnaire



پرسشنامه مصاحبه گروهی

شهر شبرغان پروژه بیات پاور



پرسشنامه مصاحبه گروهی

شهر شبرغان

این پرسشنامه جهت سروی در مورد اثرات زیست محیطی و اجتماعی پروژه بیات پاور شبرغان (Bayat Power IPP) می

"نوت برای گرداننده مصاحبه گروهی"

لذا از شما خواهشمندیم بعد از معرفی پروژه، برای تفحص و موشکافی در حین سوال و جواب از روش های مستقیم و غیر مستقیم که نمونه آن در ذیل تشریح گردیده اند استفاده نمایید.

نوع اول: به شكل مستقيم:

- √ منظور شما از این حرف چیست؟ لطفا بیشتر توضیح دهید
- ۷ منظور شما از این حرف چیست: سعه بدسر نوصیح دعیـ
 ✓ خوب شما در این مورد چی فکر میکنید؟
 ✓ این مورد را که گفتند چگونه اتفاق افتاد؟
 ✓ قضاوت و احساس شما نسبت به این مورد چگونه است؟
 ✓ می توانید در این مورد کمی بیشتر بگویید؟
 ✓ چیزی را که شما یادآوری کردید، من زیاد نفهمیدم، میشود به زبان ساده تر و با ذکر مثال بیان نمایید؟

Page 1 of 3



ليست اشتراك كنندگان

امضا/ شصت	شماره تماس	سن	جنس	شغل/ وظيفه	نام	شماره
						1
						2
						3
						4
						5
						6
						7
						8
						9
						10
						11
						12

 	 	کننده:	نام مصاحبه
			امضا:

Page 2 of 3



پرسشنامه مصاحبه گروهی، ولایت جوزجان، پروژه بیات پاور						
ولسوالي/ ناحيه / قريه	شهر	محل مصاحبه	وقت ختم مصاحبه	وقت شروع مصاحبه	تاريخ	
	شبرغان					
دستور جلسه/ نكات اصلى بحث					شماره	
آیے شما از پروڑہ نیروگاہ برق گازی بیات آگاہی دارید؟					1	
وضعیت فعلی برق در منطقه تان چگونه است ؟					2	
برق فعلى منطقه شما از كدام منبع تامين مي شود؟					3	
لطفا فواید این پروژه را در سطح ولایت و منطقه تان ذکر نمایید.					4	
آیا شما فکر می کنید که اجرای این پروژه کدام ضرری برای شما و منطقه تان داشته باشد؟					5	
به نظر شما بیشترین سود و فایده این پروژه به چه کسانی می رسد؟					6	
به نظر شما کدام چالش ها می تواند در آینده این پروژه را با مشکل مواجه نماید؟						
به نظر شما، اجرای این پروژه چه مشکلات محیط زیستی به بار خواهد آورد؟					8	
برای تطبیق بهتر این پروژه چه پیشنهادی دارید؟ لطفا توضیح دهید.						

Page 3 of 3

Group interview questionnaire

This questionnaire is intended survey of environmental and social impact assessment of Bayat Power energy in Sheberghan , Afghanistan.

Note to Group interviewer directors:

Based on group interview rules, it is not supposed to enter to detailed and point by point of subjects in interview manual. Interviewers should present enough and comprehensive information to attendees and get feedback by emphasis to direct and indirect interview methods.

So you are requested to use direct and indirected methods -as below sample- after project introduction:

Type 1) Direct Method:

What is your mean? Please explain more

What you think about this?

How this your cited matter may happen?

What is you opinions and feeling about this matter?

Can you please clear more this one?

I couldn't understand you, can you please give me a sample or simple?

Type 2) In-Direct Method:

Proper reaction to responses (yeah, right, true, well,...)

Help attendees to find proper words and expressions to describe their own idea

Group interview questionnaire, Bayat Power project, Jawzjan province							
Date	Interview start time	Interview end time	Place of interview	city	District		
No	Subjects to Discu	Subjects to Discuss					
1	Do you know ab	Do you know about Bayat Power project?					
2	How is current s	How is current status of electricity in your area?					
3	What is your ele	What is your electricity source?					
4	What is this proj	What is this project points and advantages to your area/ district or province?					
5	Do you think this	Do you think this project has disadvantages to you and your area? How (if yes)?					
6	Who are most be	Who are most beneficiary people/ group in this project?					
7	What is most cha	What is most challengeable matters to this project which may make problem?					
8	What is your ide	What is your idea about environmental issues may raise by this project in future?					
9	What is your sug	What is your suggestions to make improvement to this project implementation?					

Attendees list

No	Name	Job/business	Gender	Age	Contact #	Sign
1						
2						
3						
4						

Interviewer name and sign :

Annex 11. Labour Influx Management

Plan Employment Impacts

The total workforce employed during the construction has been estimated at 60 people. This includes unskilled and skilled labor, technicians and employees. For the operation of the new power plant and associated facilities about 36 permanent employees will have to be recruited. Employing construction workers and other staff from the region will offer an opportunity to create local employment, increase the local skill base and provide a boost to the local economy. Local communities in the region have requested to provide employment preferences to those already living near the project. They have high expectations of the employment opportunities generated by the project. Moreover, they expect an important in-migration of people from the region, the creation of new business opportunities and other economic benefits. In an area with a relatively high percentage of unemployment, the project will certainly attract a number of job seekers and followers. However, the number of new business opportunities will be limited since the project area is a restricted area, which is only accessible for employees of Contractor and related services.

In order not to advocate too high expectations which could lead to social unrest, it is important that the project provides adequate and realistic information on the opportunities the project would offer. This could be done through regular updates in the local newspapers and other media. For a number of jobs, qualified people from other regions of Afghanistan will have to be attracted. Locally affected people including women should be encouraged to take up construction employment. Women can be organized in female working groups to undertake discrete construction tasks, tree planting, health services, and other supporting services.

Mitigation Measures:

The project could benefit the local population by hiring qualified local workers for construction jobs. The following principles and requirements will be required of the Contractors to follow in their hiring for construction forces:

 Preference will be given to the local population from Sheberghan city and the suburbs who meet the eligibility for the jobs for construction;

- Recruitment process should be made public, with information on timing, recruitment agency or persons, place, and procedures;
- Publication of the above info should be done at least one month prior to recruitment commencing for any phase; information should be provided on how many jobs are available, the likely remuneration package, and the likely duration of the contracts of employment offered;
- Necessary vocational training will be provided to local people to develop their skills base to benefit from the employment opportunities under the project. This could take a number of forms beginning with sessions in local schools and/or a partnership with the local engineering college.

Labor Influx

The influx of a construction force may easily lead to social conflicts with the local population. Workers also might misbehave or get involved in illegal practices, e.g. poaching or hunting. In order to contribute to a harmonious relationship with local communities, to reduce behaviors that could lead to social conflict, and to prevent further environmental degradation a Code of Conduct was also developed for the labor force.

Project construction activities to be carried out near the local communities may cause disturbance and possible conflicts between the workforce and the local population.

- Due to increased use of trucks and other vehicles on the roads in the project area on the access roads to the urban areas elderly people, women and children will be more exposed to dangerous situations;
- The influx and accommodation of workforces will result in increased concerns for the safety of women and children. The mobility of women might be reduced;
- Workers coming from different parts of Afghanistan may have different norms and values in social behavior as compared with the resident population. In addition, migrant labor force could disturb the privacy of the local population.

Miscommunications between these two groups could easily lead to social unrest;

- To avoid the social unrest, the contractor will be provided lunch or other food during working hours
- There could be a shortage of supplies in local markets and shops due to the temporary presence of workforces. This could be a hindrance for the local population, especially for elderly people.
- Local population will have priority about unskilled labor, in order to avoid social unrest.

Mitigation Measures:

The Code of Conduct recognizes the provision of resources by the employer and shares responsibilities among the workers for the use of equipment, procedures, and training. Typical issues to be included in a Code of Conduct are the following:

- No hunting, poaching or illicit use of local natural resources;
- Careful use of local natural resources and project resources, especially water; transmission line materials, fuel, fuel-wood, and electricity;
- Restrictions related to the consumption of alcohol and drugs;
- · Safe driving practices; and
- Respect for the local community and its cultural norms in which laborers are working.