Attachment 2

1.1 MONITORING PLAN
Construction period

Environmental item	Item to be monitored	Monitoring site	Frequency	Method	Party in charge
Air quality	H_2S - CO_2	Borinquen Hotel and 4 sites (north, south, east and west) on the well base boundary	During testing period (weeks-one month): every three month (quarterly) and permanent monitoring station	Field measurement	ICE

Calidad del Aire - CAMPO GEOTERMICO BORINQUEN

Sitio	CO2 Min	CO2 Prm	CO2 Max	CO2 Std	H2S Min	H2S Prm	H2S Max	H2S Std
CAÑAS DULCES	266	376	404	5,000	0.000	0.000	0.001	0.010
CASA MAQUINAS BORINQUEN	261	362	389	5,000	0.000	0.000	0.001	0.010
HOTEL BORINQUEN	247	360	381	5,000	0.000	0.000	0.000	0.010
HOTEL BUENA VISTA	263	365	382	5,000	0.000	0.000	0.001	0.010
PLB-02	246	357	376	5,000	0.000	0.000	0.001	0.010
PLB-03	248	358	375	5,000	0.000	0.000	0.001	0.010
PLB-05	268	361	395	5,000	0.000	0.002	0.012	0.010
PLB-09	258	357	374	5,000	0.000	0.000	0.000	0.010
POBLADO BUENA VISTA	261	368	390	5,000	0.000	0.000	0.000	0.010

Environmental item	Item to be monitored	Monitoring site	Frequency	Method	Party in charge
Noise	Noise level	Borinquen Hotel, a measuring point has been located at the wells pad boundary (towards the hotel direction), and other 4 measuring points (north, south, east, and west) in the vicinity of the power plant.	During testing period (weeks-one month): once/week During power plant construction: monthly (with peak time for each construction job taken into account)	Field measurement	ICE

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Ruido - CAMPO GEOTERMICO BORINQUEN

Sitio	Ruido Min	Ruido Prm	Ruido Max	Ruido Std
CAÑAS DULCES	31	40	42	65
CASA MAQUINAS BORINQUEN	29	34	36	65
HOTEL BORINQUEN	30	35	48	65
HOTEL BUENA VISTA	30	35	39	65
PLB-02	31	36	60	65
PLB-03	31	35	39	65
PLB-05	30	36	41	65
PLB-09	30	34	39	65
POBLADO BUENA VISTA	31	35	39	65

Environmental item	Item to be monitored	Monitoring site	Frequency	Method	Party in charge
Water quality	1) pH, Electric conductivity (EC), Chlorides (Cl-)	Upper and lower parts of the streams of the Salitral rivers, and upper and lower parts of the streams within the project area (AP) of the creek running.	1) During testing period: twice/testing period (weeks-one month)	Laboratory analysis of collected samples	ICE and External laboratory to hire by ICE

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Geothermal Field	CG-BRQ
Monitored variable	pH Lab.

Site	Max.	Min.	Avg.
CG-BRQ --- NACIENTE DOS QUEBRADAS	7.86	5.99	6.9
CG-BRQ --- NACIENTE NAVARIT	7.83	5.71	6.8
CG-BRQ --- QUEBRADA GATA	8.12	5.36	7.3
CG-BRQ --- QUEBRADA TENCHA (PBR11)	7.81	5.76	6.9
CG-BRQ --- RIO SALITRAL	8.34	6.04	7.5
CG-BRQ --- RIO TIZATE	8.39	6.72	7.8
CG-BRQ --- TERMAL LOS PEDERNALES	7.28	5.95	6.7
CG-BRQ --- TOMA AGUA LAS LILAS	7.01	5.9	6.7
CG-BRQ --- TOMA DE AGUA PLB-02	7.97	4.66	7.3
CG-BRQ --- TOMA DE AGUA PLB-05	7.61	5.8	7.1
CG-BRQ --- LAGUNA DE ALMACENAMIENTO	7.84	7.08	7.4

Geothermal Field	CG-BRQ
Monitored variable	Cond. (µS/cm)

Site	Max.	Min.	Avg.
CG-BRQ --- NACIENTE DOS QUEBRADAS	210.9	97	155.6
CG-BRQ --- NACIENTE NAVARIT	245.4	148.9	184.0
CG-BRQ --- QUEBRADA GATA	348	115.4	217.6
CG-BRQ --- QUEBRADA TENCHA (PBR11)	263	74.5	142.4
CG-BRQ --- RIO SALITRAL	328	80.8	170.4
CG-BRQ --- RIO TIZATE	306.5	102.6	220.3
CG-BRQ --- TERMAL LOS PEDERNALES	187	138.7	162.5
CG-BRQ --- TOMA AGUA LAS LILAS	189	141.5	178.1
CG-BRQ --- TOMA DE AGUA PLB-02	432.3	70.6	128.3
CG-BRQ --- TOMA DE AGUA PLB-05	674	78.8	147.6
CG-BRQ --- LAGUNA DE ALMACENAMIENTO	676	102.6	359.5

Geothermal Field	CG-BRQ
Monitored variable	Cl- (ppm)

Site	Max.	Min.	Avg.
CG-BRQ --- NACIENTE DOS QUEBRADAS	8.00	2.50	4.31
CG-BRQ --- NACIENTE NAVARIT	7.80	2.00	4.26
CG-BRQ --- QUEBRADA GATA	12.20	1.31	5.86
CG-BRQ --- QUEBRADA TENCHA (PBR11)	11.30	1.43	4.65
CG-BRQ --- RIO SALITRAL	27.94	1.35	6.53
CG-BRQ --- RIO TIZATE	16.10	4.06	8.96
CG-BRQ --- TERMAL LOS PEDERNALES	4.72	2.64	3.18
CG-BRQ --- TOMA AGUA LAS LILAS	11.50	3.79	5.58
CG-BRQ --- TOMA DE AGUA PLB-02	7.49	2.76	4.62
CG-BRQ --- TOMA DE AGUA PLB-05	13.10	2.00	4.49
CG-BRQ --- LAGUNA DE ALMACENAMIENTO	8.18	0.97	4.73

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Water quality	2) Oils and grease,	Outlet of the settling basin (construction work effluents). Only in the presence of machinery in the project area (AP)	2) Oils and grease, every six months (semester) After 2 years, the continuation of monitoring will be reconsidered based on opinions of professional experts.)	Laboratory analysis of collected samples	ICE and External laboratory to hire by ICE

Site	**Oils and grease (mg/L)**	
Standard 50 mg/L	**Min**	**Max**
Q. Gata Abajo	<0,2	8
Q. Gata Arriba	<0,2	<1
Río Salitral Abajo	<0,2	4
Río Salitral Arriba	<0,2	<1
Río Tizate Abajo	<0,2	<1
Río Tizate Arriba	<0,2	<1
Tencha Abajo	<0,2	<1
Tencha Arriba	<0,2	<1
Toma PLB-02	<0,2	<1
Toma PLB-05	<0,2	<1

Water quality	3) Hexavalent chrome (Cr+6), and Mercury (Hg) and COD	NOT APPLICABLE (NA)	NOT APPLICABLE (NA)	--------	
Water quality	4) Arsenic (As)	Only in drinking water intakes	every six months (semester) After 2 years, the continuation of monitoring will be reconsidered based on opinions of professional experts.)	Laboratory analysis of collected samples	ICE and External laboratory to hire by ICE

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Site	Arsenic (mg/L)	
Standard 0,01 mg/L	**Min**	**Max**
Plantel Curubandé	<1	<2

Environmental item	Item to be monitored	Monitoring site	Frequency	Method	Party in charge
Soil	Complete analysis - Cadmium (Cd), Lead (Pb), As, Cr^{+6}, Hg, etc.	Four points in the vicinity of a representative geothermal field	One year before construction starts, and once five years after operation starts	Laboratory analysis of collected samples	ICE
		Four points in the vicinity of the power plant.	One year before construction starts, and once five years after operation starts		
	Not applicable for this period. Monitoring in 2022.				
Environmental item	**Item to be monitored**	**Monitoring site**	**Frequency**	**Method**	**Party in charge**
Fauna and flora	Plants and animals (birds, amphibians, reptiles, and mammals)	Area in the vicinity of wells pads and power plant site, the project site side of the national park, and gallery forest along the Salitral river	Monthly (with rainy and dry seasons, breeding seasons, etc. taken into account)	Visual observation records and photographs	ICE

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Results of monitoring and state of conservation of species. July, august and september 2021.

I=Appendix I CITES, II=Appendix II CITES, III=Appendix III CITES, IUCN= The International Union for Conservation of Nature, CITES=The Convention on International Trade in Endangered Species of Wild Fauna and Flora, NT= Near Threatened, EN= endangered species, RP= species with reduced or threatened populations, VU= Vulnerable.

Group	State of conservation		
Amphibian	**CITES**	**IUCN**	**MINAE N° 40548- Regulations**
Agalychnis callidryas	II		RP
Cochranella granulosa			
Craugastor fitzingeri			
Craugastor mimus			RP
Diasporus diastema			
Hypopachus variolosus			
Incilius coccifer			
Lithobates taylori			
Lithobates warszewitschii			
Pristimantis ridens			
Rhinella horribilis			
Smilisca baudinii			
Smilisca sordida			
Incilius luetkenii			RP
Craugastor bransfordii			
Craugastor megacephalus			
Birds			
Amazilia rutila	II		RP
Amazilia saucerrottei	II		RP
Amazona albifrons	II		RP
Arremonops conirostris			
Arremonops rufivirgatus			
Basileuterus rufifrons			
Brotogeris jugularis	II		RP
Burhinus bistriatus	III		
Buteo plagiatus	II		RP
Calocitta formosa			
Campephilus guatemalensis			
Campylorhynchus rufinucha			

		Cantorchilus modestus				
		Cardellina canadensis				
		Cathartes aura				
		Chiroxiphia linearis				
		Chlorostilbon canivetii	II		RP	
		Ciccaba virgata	II		RP	
		Coragyps atratus				
		Crax rubra	III	VU	RP	
		Crotophaga sulcirostris				
		Crypturellus cinnamomeus				
		Dendrocincla homochroa				
		Eucometis penicillata				
		Eumomota superciliosa				
		Euphonia hirundinacea				
		Eupsittula canicularis	II		RP	
		Eurypyga helias			RP	
		Falco rufigularis	II		RP	
		Galbula ruficauda				
		Geothlypis poliocephala				
		Habia fuscicauda				
		Heliomaster constantii	II		RP	
		Henicorhina leucosticta				
		Herpetotheres cachinnans	II		RP	
		Hylophylax naevioides				
		Lepidocolaptes souleyetii				
		Leptotila verreauxi				
		Megarynchus pitangua				
		Megascops cooperi	II		RP	
		Melanerpes hoffmannii				
		Microcerculus philomela				
		Mniotilta varia				
		Momotus lessonii				
		Morococcyx erythropygus				
		Myiarchus nuttingi				
		Myiarchus tuberculifer				
		Myiarchus tyrannulus				
		Myiodynastes luteiventris				
		Myiodynastes maculatus				

		Myiothlypis fulvicauda				
		Myiozetetes similis				
		Nyctidromus albicollis				
		Onychorhynchus coronatus				
		Pachysylvia decurtatus				
		Passerina caerulea				
		Patagioenas cayennensis				
		Patagioenas flavirostris				
		Penelope purpurascens	III		RP	
		Peucaea ruficauda				
		Phaethornis striigularis	II		RP	
		Piaya cayana				
		Pitangus sulphuratus				
		Polioptila albiloris				
		Psarocolius montezuma				
		Pseudastur albicollis	II		RP	
		Psilorhinus morio				
		Pteroglossus torquatus				
		Ramphastos sulfuratus	II		RP	
		Ramphocaenus melanurus				
		Setophaga petechia				
		Thamnophilus doliatus				
		Thryophilus pleurostictus				
		Thryophilus rufalbus				
		Tinamus major			RP	
		Tityra semifasciata				
		Trogon melanocephalus				
		Turdus grayi				
		Tyto alba				
		Vireo flavifrons				
		Vireo philadelphicus				
		Volatinia jacarina				
		Xiphorhynchus lachrymosus				
		Zenaida asiatica				
		Panterpe insignis	II		RP	
		Empidonax flaviventris				
		Rupornis magnirostris	II		RP	
		Sittasomus griseicapillus				

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		Vireo olivaceus				
		Hylomanes momotula			RP	
		Elanoides forficatus	II		RP	
		Vanellus chilensis				
		Saltator maximus				
		Dryocopus lineatus				
		Legatus leucophaius				
		Sporophila corvina				
		Setophaga fusca				
		Contopus cinereus				
		Cochlearius cochlearius				
		Mammals (Visual, Sherman, Mist nets and Camera trap)				
		Alouatta palliata	I		EN	
		Artibeus jamaicensis			RP	
		Artibeus lituratus				
		Artibeus phaeotis				
		Artibeus tolteca				
		Artibeus watsoni				
		Ateles geoffroyi	I	EN	EN	
		Caluromys derbianus				
		Canis latrans				
		Carollia castanea				
		Carollia perspicillata				
		Carollia sowelli				
		Carollia subrufa				
		Cebus imitator	II		RP	
		Conepatus semistriatus				
		Dasyprocta punctata	III			
		Didelphis marsupialis				
		Glossophaga commissarisi				
		Glossophaga soricina				
		Marmosa mexicana				
		Micronycteris microtis				
		Micronycteris schmidtorum				
		Myotis albescens				
		Myotis elegans				
		Myotis keaysi				
		Nasua narica	III			

		Odocoileus virginianus	III			
		Ototylomys phyllotis				
		Panthera onca	I	NT	EN	
		Platyrrhinus helleri				
		Pteronotus mesoamericanus				
		Rhogeessa bickhami				
		Sciurus variegatoides				
		Sylvilagus floridanus				
		Tapirus bairdii	I	EN	EN	
		Tylomys watsoni				
		Vampyriscus nymphaea			RP	
		Nyctomys sumichrasti				
		Micronycteris hirsuta				
		Sturnira parvidens				
		Vampyrum spectrum			RP	
		Myotis oxyotus				
		Cuniculus paca	III			
		Dasypus novemcinctus				
		Eira barbara	III			
		Tamandua mexicana	III			
		Leopardus pardalis	I		EN	
		Pecari tajacu	II		RP	
		Puma concolor	I		EN	
		Didelphis virginiana				
		Reptiles				
		Bothrops asper				
		Corytophanes cristatus				
		Ctenosaura similis				
		Gymnophthalmus speciosus				
		Holcosus festivus				
		Holcosus undulatus				
		Imantodes gemmistratus				
		Kinosternon scorpioides		NT		
		Leptodeira nigrofasciata				
		Micrurus nigrocinctus	III			
		Norops biporcatus				
		Norops cupreus				
		Norops oxylophus				

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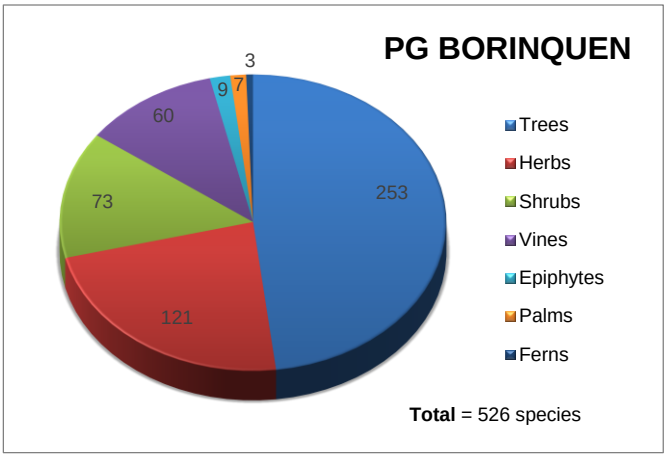
Sibon nebulatus			
Sphenomorphus cherriei			
Basiliscus basiliscus			
Geophis hoffmanni			
Hydromorphus concolor			

Wild animals monitoring. August 2021.
Daytime monitoring

Distribution of flora species by habits registered in the Borinquen Geothermal Field. March 2014 – October 2021.



Environmental item	Item to be monitored	Monitoring site	Frequency	Method	Party in charge
Waste*	Amount generated	Power plant construction site	Monthly	Total amount generated (weight or volume)	Construction contractor
	Not applicable for this period. In 2023 starts the construction of plant.				

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***Appropriate waste management including disposal of sludge will be implemented in accordance with Law for the Integrated Management of Residues (Law 8839), and in reference to Resolution No. 1948-2008-SETENA17 (page26).**