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

Descripcion_Sitio	CO2_Min	CO2_Prom	CO2_Max	CO2_MaxStd	H2S_Min	H2S_Prom	H2S_Max	H2S_MaxStd
CAÑAS DULCES	342	356	365	5000	0,000	0,000	0,000	0,010
CASA MAQUINAS BORINQUEN	342	351	357	5000	0,000	0,000	0,001	0,010
HOTEL BORINQUEN	335	345	352	5000	0,000	0,000	0,000	0,010
HOTEL BUENA VISTA	342	349	358	5000	0,000	0,000	0,000	0,010
PLB-02	355	359	362	5000	0,000	0,000	0,000	0,010
PLB-03	346	353	357	5000	0,000	0,000	0,000	0,010
PLB-05	361	363	366	5000	0,000	0,001	0,001	0,010
PLB-09	350	354	357	5000	0,000	0,000	0,000	0,010
POBLADO BUENA VISTA	359	361	362	5000	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, one site on the well base boundary (in the hotel direction), and 4 sites (north, south, east and west) in the vicinity of the power plant site.	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

Attachment 2

RUIDO - CAMPO GEOTERMICO BORINQUEN

Descripcion_Sitio	Ruido_Min	Ruido_Prom	Ruido_Max	Ruido_MaxStd	RuidoLog
CAÑAS DULCES	32	39	43	65	39
CASA MAQUINAS BORINQUEN	46	47	48	65	47
HOTEL BORINQUEN	32	32	33	65	32
HOTEL BUENA VISTA	32	33	33	65	33
PLB-02	33	33	33	65	33
PLB-03	32	33	35	65	33
PLB-05	44	48	54	65	48
PLB-09	32	32	33	65	32
POBLADO BUENA VISTA	32	33	35	65	33

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 streams of the Salitral rivers, upper and lower 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

Attachment 2

Geothermal Field	CG-BR(
Monitored variable	pH Lab.

Site	Max.	Min.	Avg.
CG-BRQ --- NACIENTE DOS QUEBRADAS	7,86	5,99	6,9
CG-BRQ --- NACIENTE NAVARIT	7,87	5,71	6,8
CG-BRQ --- QUEBRADA GATA	8,12	5,36	7,3
CG-BRQ --- QUEBRADA TENCHA (PBR11)	7,93	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	8,21	5,8	7,1
CG-BRQ --- LAGUNA DE ALMACENAMIENTO	7,84	3,02	7,2
Total general	**8,39**	**3,02**	**7,3**

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

Site	Max.	Min.	Avg.
CG-BRQ --- NACIENTE DOS QUEBRADAS	210,9	97	154,9
CG-BRQ --- NACIENTE NAVARIT	245,4	148,9	183,7
CG-BRQ --- QUEBRADA GATA	348	14,5	211,7
CG-BRQ --- QUEBRADA TENCHA (PBR11)	263	74,5	138,7
CG-BRQ --- RIO SALITRAL	328	80,8	170,3
CG-BRQ --- RIO TIZATE	306,5	125,2	217,5
CG-BRQ --- TERMAL LOS PEDERNALES	238	138,7	165,8
CG-BRQ --- TOMA AGUA LAS LILAS	213	141,5	179,2
CG-BRQ --- TOMA DE AGUA PLB-02	432,3	70,6	120,2
CG-BRQ --- TOMA DE AGUA PLB-05	971	78,8	154,3
CG-BRQ --- LAGUNA DE ALMACENAMIENTO	885	92	292,4
Total general	**971**	**14,5**	**174,5**

Attachment 2

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

Site	Max.	Min.	Avg.
CG-BRQ --- NACIENTE DOS QUEBRADAS	8	2,2	4,2
CG-BRQ --- NACIENTE NAVARIT	7,8	2	4,2
CG-BRQ --- QUEBRADA GATA	12,2	1,31	5,7
CG-BRQ --- QUEBRADA TENCHA (PBR11)	11,3	1,33	4,2
CG-BRQ --- RIO SALITRAL	27,94	1,35	6,5
CG-BRQ --- RIO TIZATE	16,1	2,2	8,7
CG-BRQ --- TERMAL LOS PEDERNALES	4,72	2,47	3,2
CG-BRQ --- TOMA AGUA LAS LILAS	11,5	3,79	5,5
CG-BRQ --- TOMA DE AGUA PLB-02	7,49	2,75	4,4
CG-BRQ --- TOMA DE AGUA PLB-05	13,1	1,42	4,4
CG-BRQ --- LAGUNA DE ALMACENAMIENTO	8,18	0,97	3,8
Total general	**27,94**	**0,97**	**5,7**

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

Attachment 2

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

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**

Attachment 2

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 site	One year before construction starts, and once five years after operation starts		
	Not applicable for this period. Monitoring in 2023.				

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 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

Attachment 2

Results of monitoring and state of conservation of species. October, november and december 2022.

Group	State of conservation		
Amphibian	CITES	IUCN	MINAE N° 40548-Regulations
Agalychnis callidryas	II		RP
Cochranella granulosa			
Craugastor fitzingeri			
Craugastor mimus			RP
Craugastor megacephalus			
Diasporus diastema			
Incilius valliceps			
Lithobates warszewitschii			
Pristimantis ridens			
Rhinella horribilis			
Smilisca phaeota			
Smilisca sordida			
Birds			
Amazilia rutila	II		RP
Amazilia saucerrottei	II		RP
Amazilia tzacatl	II		RP
Amazona albifrons	II		RP
Arremonops rufivirgatus			
Basileuterus rufifrons			
Brotogeris jugularis	II		RP
Calocitta formosa			
Campephilus guatemalensis			
Campylopterus hemileucurus	II		RP
Cantorchilus modestus			
Cathartes aura			
Chiroxiphia linearis			
Ciccaba virgata	II		RP
Contopus sordidulus			
Coragyps atratus			
Crax rubra	III	VU	RP
Crotophaga sulcirostris			

Dendrocincla homochroa				
Dendrocolaptes sanctithomae				
Empidonax flaviventris				
Eucometis penicillata				
Eumomota superciliosa				
Euphonia hirundinacea				
Euphonia luteicapilla				
Falco rufigularis	II		RP	
Galbula ruficauda				
Geothlypis poliocephala				
Habia fuscicauda				
Heliomaster constantii	II		RP	
Henicorhina leucosticta				
Herpetotheres cachinnans	II		RP	
Hylocharis eliciae	II		RP	
Hylomanes momotula			RP	
Hylophylax naevioides				
klais guimeti	II		RP	
Lepidocolaptes souleyetii				
Leptotila verreauxi				
Megarynchus pitangua				
Melanerpes hoffmannii				
Mionectes oleagineus				
Microcerculus philomela				
Mniotilta varia				
Momotus lessonii				
Morococcyx erythropygus				
Myiarchus tuberculifer				
Myiarchus tyrannulus				
Myiozetetes similis				
Nyctidromus albicollis				
Penelope purpurascens	III		RP	
Peucaea ruficauda				
Phaethornis longirostris	II		RP	
Phaethornis striigularis	II		RP	
Pheucticus ludovicianus				
Piaya cayana				
Psarocolius montezuma				

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Psilorhinus morio				
Pteroglossus torquatus				
Ramphastos sulfuratus	II		RP	
Ramphocaenus melanurus				
Rupornis magnirostris	II		RP	
Setophaga petechia				
Thamnophilus doliatus				
Thryophilus pleurostictus				
Thryophilus rufalbus				
Tinamus major		NT	RP	
Trogon melanocephalus				
Tyrannus melancholicus				
Vireo flavifrons				
Volatinia jacarina				
Pionus senilis	II		EN	
Porphyrio martinicus				
Mammals (Visual, Sherman, Mist nets and Camera trap)				
Alouatta palliata	I		EN	
Artibeus jamaicensis			RP	
Ateles geoffroyi	I	EN	EN	
Carollia castanea				
Carollia perspicillata				
Carollia sowelli				
Carollia subrufa				
Cebus imitator	II		RP	
Cuniculus paca	III			
Dasyprocta punctata	III			
Glossophaga commissarisi				
Lophostoma brasiliense				
Myotis albescens				
Nasua narica	III			
Odocoileus virginianus	III			
Platyrrhinus helleri				
Pteronotus mesoamericanus				
Puma concolor	I		EN	
Sciurus variegatoides				
Tapirus bairdii	I	EN	EN	
Vampyriscus nymphaea			RP	

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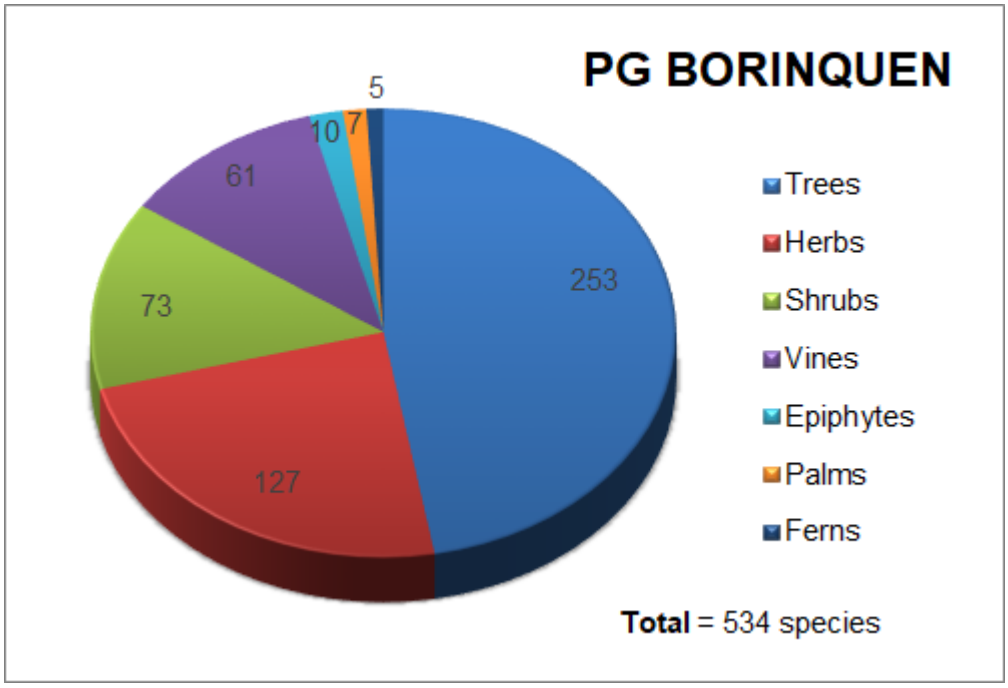
Caluromys derbianus			
Conepatus semistriatus			
Dasypus novemcinctus			
Didelphis marsupialis			
Didelphis virginiana			
Eira barbara			
Leopardus pardalis	I		EN
Panthera onca		EN	
Tayassu pecari	II	VU	EN
Sciurus deppei			RP
Sturnira parvidens			
Tamandua mexicana	III		
Uroderma bilobatum			
Sylvilagus floridanus			
Reptiles			
Bothrops asper			
Corytophanes cristatus			
Holcosus festivus			
Imantodes cenchoa			
Mastigodryas melanolomus			
Norops oxylophus			
Oxybelis fulgidus			
Sibon nebulatus			

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.

Wild animals monitoring. October 2022.

Attachment 2

Distribution of flora species by habits registered in the Borinquen Geothermal Field. March 2014 – december 2022.



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

*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).