APPENDIX M

IMPACT INTERACTION MATRIX

Table M.1. Environmental Impacts Interaction Matrix

Project Activities and Impact Components / Components		Physical Environment																	Biological Environment										Socio-economic Environment											
	Land loss	Seismicity	Landslides	Erosion and Sedimentation	Climate	Greenhouse Gas Emission	Air Quality	Noise	Downstream Flow	Water Use	Water Quality in the Reservoir	Water Quality in the Downstream	Sanitary Risk	Land Use	Agricultural Land	Forests	Vegetation Communities (Project facilitie	Vegetation Communities Downstream	Endemic Flora Species (Population)	Endemic Flora Species (Species-wise)	Mammals	Birds	Reptiles	Amphibians	Invertebrates	Coruh Valley Wildlife Protection Area	Aquatic Fauna	Downstream Aquatic Fauna	Population	Vulnerable Groups	Employment	Education	Social Interactions	Living Standards	Transportation Network	Landscape and Scenery	Cultural Property	Tourism	National Economy	Local Economy
Construction																																								
Dam and power plant	Significant adverse impact		Insignificant adverse impact	Insignificant adverse impact		Insignificant adverse impact	Significant adverse impact	Insignificant adverse impact	Insignificant adverse impact			Significant adverse impact		Insignificant adverse impact			Insignificant adverse impact		Insignificant adverse impact	Insignificant adverse impact	Insignificant adverse impact	Insignificant adverse impact				Insignificant adverse impact	Insignificant adverse impact	Insignificant adverse impact	Beneficial impact		Beneficial impact					Significant adverse impact		Insignificant adverse impact	Beneficial impact	Beneficial impact
Diversion tunnels and cofferdams							Insignificant adverse impact	Insignificant adverse impact	Insignificant adverse impact			Insignificant adverse impact		Insignificant adverse impact			Insignificant adverse impact	Insignificant adverse impact			Insignificant adverse impact	Insignificant adverse impact													Significant adverse impact		Insignificant adverse impact		
Borrow and disposal areas	Significant adverse impact	Insignificant adverse impact	Insignificant adverse impact	Insignificant adverse impact		Insignificant adverse impact	Insignificant adverse impact	Insignificant adverse impact		Insignificant adverse impact		Significant adverse impact		Significant adverse impact			Insignificant adverse impact		Insignificant adverse impact	Insignificant adverse impact	Insignificant adverse impact	Insignificant adverse impact					Insignificant adverse impact	Insignificant adverse impact				Beneficial impact						Significant adverse impact				
Service and by-pass roads			Insignificant adverse impact				Insignificant adverse impact	Insignificant adverse impact						Insignificant adverse impact			Insignificant adverse impact		Insignificant adverse impact	Insignificant adverse impact	Insignificant adverse impact					Insignificant adverse impact	Insignificant adverse impact		Beneficial impact		Beneficial impact				Beneficial impact						Beneficial impact
Relocation roads			Insignificant adverse impact				Insignificant adverse impact	Insignificant adverse impact						Insignificant adverse impact	Insignificant adverse impact		Insignificant adverse impact		Significant adverse impact	Insignificant adverse impact	Insignificant adverse impact					Insignificant adverse impact	Insignificant adverse impact		Beneficial impact		Beneficial impact				Beneficial impact						Beneficial impact
Camp facilities	Significant adverse impact						Insignificant adverse impact	Insignificant adverse impact		Insignificant adverse impact		Insignificant adverse impact		Insignificant adverse impact	Insignificant adverse impact	Insignificant adverse impact	Insignificant adverse impact		Significant adverse impact		Insignificant adverse impact	Insignificant adverse impact	Insignificant adverse impact	Insignificant adverse impact			Insignificant adverse impact				Beneficial impact		Insignificant adverse impact				Insignificant adverse impact				Beneficial impact
Switchyard and transmission line														Insignificant adverse impact			Insignificant adverse impact					Insignificant adverse impact																		
Urban relocation site														Insignificant adverse impact			Insignificant adverse impact		Significant adverse impact																						
Reservoir impounding			Insignificant adverse impact	Insignificant adverse impact					Significant adverse impact	Insignificant adverse impact	Insignificant adverse impact	Insignificant adverse impact		Significant adverse impact	Significant adverse impact	Significant adverse impact	Insignificant adverse impact	Insignificant adverse impact	Significant adverse impact	Significant adverse impact	Insignificant adverse impact	Beneficial impact	Insignificant adverse impact	Insignificant adverse impact	Beneficial impact	Insignificant adverse impact	Insignificant adverse impact	Insignificant adverse impact	Insignificant adverse impact						Significant adverse impact	Beneficial impact	Insignificant adverse impact	Insignificant adverse impact		
Land take and impoundment																																								
Construction sites														Significant adverse impact	Insignificant adverse impact	Insignificant adverse impact	Insignificant adverse impact	Insignificant adverse impact	Significant adverse impact	Insignificant adverse impact	Insignificant adverse impact	Insignificant adverse impact	Insignificant adverse impact	Insignificant adverse impact	Insignificant adverse impact	Insignificant adverse impact	Insignificant adverse impact		Significant adverse impact							Significant adverse impact					
Reservoir	Significant adverse impact		Insignificant adverse impact	Insignificant adverse impact	Insignificant adverse impact	Insignificant adverse impact			Significant adverse impact		Insignificant adverse impact	Insignificant adverse impact	Insignificant adverse impact	Significant adverse impact	Significant adverse impact	Significant adverse impact	Insignificant adverse impact	Insignificant adverse impact	Significant adverse impact	Significant adverse impact	Insignificant adverse impact	Beneficial impact	Insignificant adverse impact	Insignificant adverse impact	Beneficial impact	Insignificant adverse impact	Insignificant adverse impact	Insignificant adverse impact	Significant adverse impact	Insignificant adverse impact					Significant adverse impact	Beneficial impact	Insignificant adverse impact	Beneficial impact		Beneficial impact
Relocation roads	Insignificant adverse impact		Insignificant adverse impact				Insignificant adverse impact							Insignificant adverse impact	Insignificant adverse impact				Insignificant adverse impact	Insignificant adverse impact	Insignificant adverse impact		Insignificant adverse impact	Insignificant adverse impact		Insignificant adverse impact			Significant adverse impact		Beneficial impact				Beneficial impact			Beneficial impact		Beneficial impact
Expropriation														Significant adverse impact	Significant adverse impact	Insignificant adverse impact													Insignificant adverse impact	Insignificant adverse impact		Beneficial impact	Significant adverse impact	Insignificant adverse impact						
Resettlement										Insignificant adverse impact											Insignificant adverse impact		Insignificant adverse impact	Insignificant adverse impact					Significant adverse impact	Insignificant adverse impact		Beneficial impact	Insignificant adverse impact	Significant adverse impact						
Urban relocation site										Insignificant adverse impact											Insignificant adverse impact		Insignificant adverse impact	Insignificant adverse impact					Significant adverse impact	Insignificant adverse impact		Beneficial impact	Insignificant adverse impact	Significant adverse impact						
Operation																																								
Electricity production									Insignificant adverse impact																	Insignificant adverse impact	Insignificant adverse impact			Beneficial impact			Beneficial impact					Beneficial impact	Beneficial impact
Reservoir operation				Insignificant adverse impact					Significant adverse impact		Insignificant adverse impact	Insignificant adverse impact					Insignificant adverse impact	Insignificant adverse impact										Insignificant adverse impact													
Downstream discharge									Significant adverse impact			Insignificant adverse impact		Insignificant adverse impact				Insignificant adverse impact									Insignificant adverse impact	Insignificant adverse impact												
Watershed management			Beneficial impact	Beneficial impact					Beneficial impact	Beneficial impact	Beneficial impact			Beneficial impact	Beneficial impact	Beneficial impact										Beneficial impact					Beneficial impact			Beneficial impact				Beneficial impact	Beneficial impact	Beneficial impact

Beneficial impact
Negligible (or no) impact
Insignificant adverse impact
Significant adverse impact