

TARIFAS EN BARRA ACTUALIZADAS EN SUBESTACIONES BASE

TARIFAS EN BARRA ACTUALIZADAS EN SUBESTACIONES BASE

04 DE JULIO DE 2008

Resoluciones OSINERGMIN N° 341-2008-OS/CD, N° 457-2008-OS/CD, N° 462-2008-OS/CD, N° 463-2008-OS/CD, N° 577-2008-OS/CD

	TENSIÓN kV	PPM SI./kW-mes	PMP ctm. SI./kW.h	PEMF ctm. SI./kW.h	PCSPT ¹ SI./kW-mes	CPSEE ² ctm. SI./kW.h	CPSEE ² ctm. SI./kW.h
SISTEMA ELÉCTRICO INTERCONECTADO NACIONAL							
Talara	220	14.64	13.23	9.73	5.04	0.0076	
Piura Oeste	220	14.71	13.35	9.83	5.04	0.0076	
Chiclayo Oeste	220	14.57	13.43	9.88	5.04	0.0076	
Guadalupe	220	14.56	13.51	9.93	5.04	0.0076	
Guadalupe60	60	14.54	13.54	9.96	5.04	0.0076	
Trujillo Norte	220	14.49	13.52	9.95	5.04	0.0076	
Chimbote 1	220	14.31	13.32	9.82	5.04	0.0076	
Paramonga	220	14.36	13.12	9.59	5.04	0.0076	
Paramonga138	138	14.31	13.78	10.19	5.04	0.0076	0.17
Huacho	220	14.38	13.13	9.58	5.04	0.0076	
Zapallal	220	14.39	13.11	9.53	5.04	0.0076	
Ventanilla	220	14.41	13.10	9.53	5.04	0.0076	
Lima	220	14.47	13.12	9.55	5.04	0.0076	
Cantera	220	14.41	13.02	9.53	5.04	0.0076	
Desierto	220	14.40	12.19	9.33	5.04	0.0076	
Chilca	220	14.40	12.99	9.49	5.04	0.0076	
Independencia	220	14.40	13.05	9.58	5.04	0.0076	
Ica	220	14.57	13.20	9.69	5.04	0.0076	0.15
Marcona	220	14.97	13.48	9.88	5.04	0.0076	0.89
Mantaro	220	14.02	12.71	9.32	5.04	0.0076	
Huayucachi	220	14.13	12.84	9.38	5.04	0.0076	
Pachachaca	220	14.19	12.87	9.41	5.04	0.0076	
Huancavelica	220	14.12	12.80	9.38	5.04	0.0076	
Callahuanca	220	14.28	12.96	9.46	5.04	0.0076	
Cajamarquilla	220	14.41	13.08	9.53	5.04	0.0076	0.07
Huallanca	138	13.73	12.79	9.51	5.04	0.0076	
Vizcarra	220	14.34	12.93	9.45	5.04	0.0076	
Tingo María	220	14.22	12.62	9.21	5.04	0.0076	
Aguaytía	220	14.14	12.47	9.08	5.04	0.0076	
Pucallpa	60	14.62	12.71	9.23	5.04	0.0076	2.08
Tingo María138	138	14.21	12.62	9.19	5.04	0.0076	
Huánuco	138	14.30	12.83	9.34	5.04	0.0076	
Paragsha II	138	14.27	12.85	9.41	5.04	0.0076	0.08
Oroya Nueva220	220	14.19	12.86	9.42	5.04	0.0076	0.08
Oroya Nueva50	50	14.26	12.92	9.46	5.04	0.0076	0.08
Carhuamayo138	138	14.31	12.95	9.45	5.04	0.0076	0.08
Carhuamayo Nueva	220	14.12	12.76	9.35	5.04	0.0076	
Caripa	138	14.32	13.04	9.51	5.04	0.0076	0.08
Condorcocha44	44	14.41	13.06	9.53	5.04	0.0076	0.60
Machupicchu	138	14.01	13.26	9.47	5.04	0.0076	
Cachimayo	138	14.49	13.68	9.79	5.04	0.0076	
Cusco	138	14.46	13.68	9.79	5.04	0.0076	
Combapata	138	14.64	13.76	9.96	5.04	0.0076	
Tintaya	138	14.76	13.81	10.15	5.04	0.0076	
Ayaviri	138	14.47	13.54	9.97	5.04	0.0076	
Azángaro	138	14.31	13.40	9.86	5.04	0.0076	
Julica	138	14.76	13.75	10.12	5.04	0.0076	
Puno138	138	14.90	13.85	10.24	5.04	0.0076	
Puno220	220	14.91	13.86	10.25	5.04	0.0076	
Callalli	138	14.83	13.87	10.23	5.04	0.0076	
Santuario	138	14.82	13.71	10.15	5.04	0.0076	
Arequipa	138	14.91	13.79	10.19	5.04	0.0076	0.12
Socabaya220	220	14.82	13.78	10.19	5.04	0.0076	
Cerro Verde	138	14.95	13.82	10.21	5.04	0.0076	
Repartición	138	15.02	13.87	10.25	5.04	0.0076	
Mollendo	138	15.07	13.88	10.26	5.04	0.0076	
Montalvo220	220	15.01	13.91	10.32	5.04	0.0076	0.44
Montalvo	138	15.01	13.93	10.33	5.04	0.0076	0.44
Ilo	138	15.14	14.05	10.44	5.04	0.0076	0.44
Botiflaca	138	15.14	14.02	10.39	5.04	0.0076	0.44
Toquepala	138	15.16	14.02	10.43	5.04	0.0076	0.44
Aricota138	138	15.11	13.90	10.40	5.04	0.0076	
Aricota66	66	15.08	13.85	10.40	5.04	0.0076	
Tacna220 (SE Los Héroes)	220	15.07	13.95	10.35	5.04	0.0076	
Tacna66 (SE Los Héroes)	66	15.24	14.02	10.37	5.04	0.0076	0.51
SISTEMAS AISLADOS							
Adinelsa	MT	21.79	22.94	22.94			
Chavimochic	MT	21.79	22.94	22.94			
Edelinor	MT	21.79	22.94	22.94			
Edelsa	MT	21.79	22.94	22.94			
Egepsa	MT	21.79	22.94	22.94			
Electro Oriente	MT	22.63	40.85	40.85			
Electro Pangoa	MT	21.79	22.94	22.94			
Electro Puno	MT	23.37	64.60	64.60			
Electro Sur Este	MT	23.33	72.17	72.17			
Electro Sur Medio	MT	23.37	64.60	64.60			
Electro Ucayali	MT	21.79	22.94	22.94			
Electrocentro	MT	21.79	22.94	22.94			
Electronorte	MT	21.94	22.06	22.06			
Emseusa	MT	22.52	18.51	18.51			
Hidrandina	MT	21.80	23.17	23.17			
Seal	MT	22.82	49.44	49.44			
Sersa	MT	22.64	41.46	41.46			

1. Resolución OSINERGMIN N° 462-2008-OS/CD.

2. Resoluciones OSINERGMIN N° 065-2005-OS/CD, N° 146-2005-OS/CD, Resoluciones OSINERGMIN N° 169-2007-OS/CD, N° 360-2007-OS/CD, N° 463-2008-OS/CD.

3. CPSEE, Línea 220kV Zapallal-Chimbote 1.

Peaje de Conexión al Sistemas Principal de Transmisión

Resoluciones OSINERGMIN N° 341-2008-OS/CD, N° 462-2008-OS/CD.

04 DE JULIO DE 2008

Sistema de Transmisión	PCSPT SI./kW-mes
SPT de REP	1.08
SPT de San Gabán	0.01
SPT de Antamina	0.01
SPT de Eneval	0.17
SPT de Redetur	0.70
SPT de Transmataro	1.73
SPT de ISA	0.52
Garantía por Red Principal TGP	0.77
Garantía por Red Principal GNLC	0.05
	5.04

Peaje Secundario por Transmisión Equivalente en energía de la Subestaciones Base

Resoluciones OSINERGMIN N° 065-2005-OS/CD, N° 146-2005-OS/CD

04 DE JULIO DE 2008

Subestaciones Base	Tensión kV	Instalaciones Secundarias	CPSEE01 ctm. SI./kW.h
Paragsha II	138		
Oroya Nueva	220		
Oroya Nueva	50	S.E. Oroya Nueva - Transformación 220/50/13.8 kV	0.0844
Carhuamayo	138		
Caripa	138		
Condorcocha	44	SST Transformación Oroya Nueva 220/50/13.8 kV	0.0844
		SST Caripa - Condorcocha, S.E. Condorcocha 138/44 kV	0.5139
Montalvo	220		
Montalvo	138		
Ilo	138	SST de Enersur	0.4390
Botiflaca	138		
Toquepala	138		
Arequipa	138	SST Santuario - Chilina 138 kV	0.1151
Cajamarquilla	220	SST Celda de Transformación 220kV - S.E. Cajamarquilla	0.0666
Paramonga Existente	138	SST Paramonga Nueva-Paramonga Existente	0.0363

Peaje Secundario por Transmisión Equivalente en energía de la Subestaciones Base

Resoluciones OSINERGMIN N° 169-2007-OS/CD, N° 360-2007-OS/CD, N° 342-2008-OS/CD, N° 463-2008-OS/CD, N° 577-2008-OS/CD

04 DE JULIO DE 2008

Subestaciones Base	Tensión kV	Instalaciones Secundarias	CPSEE ctm. SI./kW.h
Tacna	66	S.E. Tacna - Transf. 220/66/10 kV 50 MVA	0.5145
Pucallpa	60	L.T. Aguaytía Pucallpa, S.E. Aguaytía 220/138/22.9 kV, S.E. Pucallpa 138/60/10 kV y Reactor 8 MVAR	2.0824
Paramonga Existente	138	SST Paramonga Nueva 220/138kV	0.1296
Ica	220	SST Independencia - Ica 220kV	0.1547
		SST Independencia - Ica 220kV	0.1547
Marcona	220	SST Ica - Marcona 220kV	0.7357
		Total	0.8904

PRECIOS EN BARRA EN SUBESTACIONES BASE

04 DE JULIO DE 2008

	TENSIÓN	PPB	PEBP*	PEBF*
	kV	SI./kW-mes	ctm. SI./kW.h	ctm. SI./kW.h
SISTEMA ELÉCTRICO INTERCONECTADO NACIONAL				
Talara	220	19.68	13.24	9.74
Piura Oeste	220	19.75	13.36	9.84
Chiclayo Oeste	220	19.61	13.44	9.89
Guadalupe	220	19.60	13.52	9.94
Guadalupe60	60	19.58	13.55	9.96
Trujillo Norte	220	19.53	13.53	9.95
Chimbote 1	220	19.35	13.33	9.83
Paramonga	220	19.40	13.13	9.59
Paramonga138	138	19.35	13.95	10.37
Huacho	220	19.42	13.14	9.58
Zapallal	220	19.43	13.11	9.54
Ventanilla	220	19.45	13.10	9.54
Lima	220	19.51	13.13	9.56
Cantera	220	19.45	13.02	9.54
Desierto	220	19.44	12.20	9.34
Chilca	220	19.44	13.00	9.49
Independencia	220	19.44	13.06	9.58
Ica	220	19.61	13.36	9.85
Marcona	220	20.01	14.37	10.78
Mantaro	220	19.06	12.72	9.32
Huayucachi	220	19.17	12.85	9.39
Pachachaca	220	19.24	12.88	9.41
Huancavelica	220	19.16	12.81	9.39
Callahuanca	220	19.32	12.97	9.47
Cajamarquilla	220	19.45	13.16	9.60
Huallanca	138	18.78	12.80	9.52
Vizcarra	220	19.39	12.94	9.46
Tingo María	220	19.26	12.63	9.21
Aguaytía	220	19.18	12.48	9.09
Pucallpa	60	19.66	14.80	11.32
Tingo María138	138	19.25	12.63	9.20
Huánuco	138	19.34	12.83	9.35
Paragsha II	138	19.31	12.94	9.50
Oroya Nueva220	220	19.24	12.95	9.51
Oroya Nueva50	50	19.30	13.01	9.55
Carhuamayo138	138	19.35	13.04	9.54
Carhuamayo Nueva	220	19.16	12.77	9.36
Caripa	138	19.36	13.13	9.60
Condorcocha44	44	19.45	13.67	10.14
Machupicchu	138	19.05	13.27	9.48
Cachimayo	138	19.53	13.69	9.80
Cusco	138	19.50	13.69	9.80
Combapata	138	19.68	13.76	9.96
Tintaya	138	19.80	13.82	10.15
Ayaviri	138	19.51	13.55	9.98
Azángaro	138	19.35	13.41	9.86
Julica	138	19.80	13.75	10.13
Puno138	138	19.94	13.85	10.24
Puno220	220	19.95	13.87	10.26
Callalli	138	19.87	13.88	10.23
Santuario	138	19.86	13.72	10.15
Arequipa	138	19.95	13.91	10.31
Socabaya220	220	19.96	13.79	10.20
Cerro Verde	138	19.99	13.83	10.22
Repartición	138	20.06	13.88	10.26
Mollendo	138	20.11	13.89	10.27
Montalvo220	220	20.05	14.36	10.76
Montalvo	138	20.05	14.37	10.77
Ilo	138	20.18	14.50	10.88
Botiflaca	138	20.18	14.46	10.84
Toquepala	138	20.20	14.46	10.87
Aricota138	138	20.16	13.91	10.41
Aricota66	66	20.12	13.85	10.41
Tacna220 (SE Los Héroes)	220	20.11	13.96	10.36
Tacna66 (SE Los Héroes)	66	20.28	14.54	10.89
SISTEMAS AISLADOS				
Adrielsa	MT	21.79	22.94	22.94
Chavimochic	MT	21.79	22.94	22.94
Edelnor	MT	21.79	22.94	22.94
Edelsa	MT	21.79	22.94	22.94
Egessa	MT	21.79	22.94	22.94
Electro Oriente	MT	22.63	40.85	40.85
Electro Pangoa	MT	21.79	22.94	22.94
Electro Puno	MT	23.37	64.60	64.60
Electro Sur Este	MT	23.33	72.17	72.17
Electro Sur Medio	MT	23.37	64.60	64.60
Electro Ucayali	MT	21.79	22.94	22.94
Electrocentro	MT	21.79	22.94	22.94
Electronorte	MT	21.94	22.06	22.06
Emseusa	MT	22.52	18.51	18.51
Hidrandina	MT	21.80	23.17	23.17
Seal	MT	22.82	49.44	49.44
Sersa	MT	22.64	41.46	41.46

TARIFAS A NIVEL GENERACIÓN ACTUALIZADAS EN SUBESTACIONES BASE

TARIFAS A NIVEL GENERACIÓN ACTUALIZADAS EN SUBESTACIONES BASE
04 DE JULIO DE 2008
Resoluciones OSINERGMIN N° 364-2008-OS/CD, N° 341-2008-OS/CD, N° 457-2008-OS/CD, N° 462-2008-OS/CD, N° 463-2008-OS/CD, N° 577-2008-OS/CD

SISTEMA ELÉCTRICO INTERCONECTADO NACIONAL	TENSIÓN	PPM	PEMP	PEMF	PCSPT ¹	CPSEE ³	CPSEE ²
	kV	\$/kW-mes	ctm. \$/kW.h	ctm. \$/kW.h	\$/kW-mes	ctm. \$/kW.h	ctm. \$/kW.h
Talara	220	14.87	9.88	7.79	5.04	0.0076	
Piura Oeste	220	14.97	9.88	7.97	5.04	0.0076	
Chiclayo Oeste	220	14.76	10.01	8.05	5.04	0.0076	
Guadalupe	220	14.74	10.14	8.16	5.04	0.0076	
Guadalupe60	60	14.71	10.15	8.17	5.04	0.0076	
Trujillo Norte	220	14.64	10.21	8.19	5.04	0.0076	
Chimbote 1	220	14.37	10.10	8.12	5.04	0.0076	
Paramonga	220	14.43	10.09	7.96	5.04	0.0076	
Paramonga138	138	14.37	10.06	7.95	5.04	0.0076	0.17
Huacho	220	14.47	10.27	7.97	5.04	0.0076	
Zapallal	220	14.49	10.40	7.95	5.04	0.0076	
Ventanilla	220	10.56	10.56	7.96	5.04	0.0076	
Lima	220	14.61	10.89	8.13	5.04	0.0076	
Cantera	220	14.52	10.66	8.11	5.04	0.0076	
Desierto	220	14.50	10.56	8.09	5.04	0.0076	
Chilca	220	14.50	10.95	8.13	5.04	0.0076	
Independencia	220	14.50	10.35	8.07	5.04	0.0076	
Ica	220	14.76	10.44	8.15	5.04	0.0076	0.15
Marcona	220	15.35	10.60	8.28	5.04	0.0076	0.89
Mantaro	220	13.93	9.29	7.80	5.04	0.0076	
Huayucachi	220	14.10	9.74	7.85	5.04	0.0076	
Pachachaca	220	14.20	9.23	7.92	5.04	0.0076	
Huancavelica	220	14.08	9.58	7.88	5.04	0.0076	
Callahuanca	220	14.32	10.05	8.00	5.04	0.0076	
Cajamarquilla	220	14.52	10.52	8.09	5.04	0.0076	0.07
Huallanca	138	13.50	9.69	7.85	5.04	0.0076	
Viczarra	220	14.41	9.69	7.87	5.04	0.0076	
Tingo Maria	220	14.42	9.66	7.87	5.04	0.0076	
Aguytia	220	14.11	9.30	7.56	5.04	0.0076	
Pucallpa	60	14.84	9.47	7.65	5.04	0.0076	2.08
Tingo Maria138	138	14.21	9.36	7.65	5.04	0.0076	
Huánuco	138	14.35	9.41	7.78	5.04	0.0076	
Paragsha II	138	14.30	9.40	7.85	5.04	0.0076	0.08
Oroya Nueva220	220	14.20	9.26	7.91	5.04	0.0076	0.08
Oroya Nueva50	50	14.29	9.34	7.94	5.04	0.0076	0.08
Carhuamayo138	138	14.36	9.41	7.88	5.04	0.0076	0.08
Carhuamayo Nueva	220	14.07	9.29	7.81	5.04	0.0076	
Caripa	138	14.38	9.40	7.92	5.04	0.0076	0.08
Condorcocha44	44	14.52	9.41	7.93	5.04	0.0076	0.60
Machupicchu	138	13.92	8.91	7.80	5.04	0.0076	
Cachimayo	138	14.66	9.18	8.06	5.04	0.0076	
Cusco	138	14.60	9.21	8.07	5.04	0.0076	
Combapata	138	14.86	9.37	8.28	5.04	0.0076	
Tintaya	138	15.05	9.56	8.51	5.04	0.0076	
Ayaviri	138	14.61	9.36	8.36	5.04	0.0076	
Azángaro	138	14.36	9.26	8.28	5.04	0.0076	
Julica	138	15.04	9.59	8.53	5.04	0.0076	
Puno138	138	15.25	9.69	8.65	5.04	0.0076	
Puno220	220	15.27	9.71	8.65	5.04	0.0076	
Callalli	138	15.14	9.68	8.63	5.04	0.0076	
Santuario	138	15.14	9.72	8.65	5.04	0.0076	
Arequipa	138	15.27	9.79	8.70	5.04	0.0076	0.12
Socabaya220	220	15.28	9.79	8.69	5.04	0.0076	
Cerro Verde	138	15.35	9.81	8.72	5.04	0.0076	
Repartición	138	15.44	9.84	8.73	5.04	0.0076	
Mollendo	138	15.52	9.84	8.73	5.04	0.0076	
Montalvo220	220	15.42	9.80	8.75	5.04	0.0076	0.44
Montalvo	138	15.43	9.80	8.75	5.04	0.0076	0.44
Ilo	138	15.61	9.87	8.80	5.04	0.0076	0.44
Botiflaca	138	15.61	9.86	8.79	5.04	0.0076	0.44
Toquepala	138	15.64	9.87	8.82	5.04	0.0076	0.44
Aricota138	138	15.04	9.61	8.79	5.04	0.0076	
Aricota66	66	15.54	9.79	8.78	5.04	0.0076	
Tacna220 (SE Los Héroes)	220	15.52	9.84	8.77	5.04	0.0076	
Tacna66 (SE Los Héroes)	66	15.77	9.89	8.80	5.04	0.0076	0.51
SISTEMAS AISLADOS							
Adinelsa	MT	21.92	19.77	19.77			
Chavimochic	MT	21.92	19.77	19.77			
Edelnor	MT	21.92	19.77	19.77			
Edelsa	MT	21.92	19.77	19.77			
Egepsa	MT	21.92	19.77	19.77			
Electro Oriente	MT	23.79	26.20	26.20			
Electro Pangoa	MT	21.92	19.77	19.77			
Electro Puno	MT	26.56	36.89	36.89			
Electro Sur Este	MT	26.84	41.08	41.08			
Electro Sur Medio	MT	26.56	36.89	36.89			
Electro Ucayali	MT	21.92	19.77	19.77			
Electrocentro	MT	21.92	19.77	19.77			
Electronorte	MT	22.07	19.25	19.25			
Emseusa	MT	22.63	17.09	17.09			
Hidrandina	MT	21.94	19.86	19.86			
Seal	MT	24.52	30.30	30.30			
Sersa	MT	23.84	26.45	26.45			

1. Resolución OSINERGMIN N° 462-2008-OS/CD.
2. Resoluciones OSINERG N° 065-2005-OS/CD, N° 146-2005-OS/CD, N° 251-2006-OS/CD, Resoluciones OSINERGMIN N° 169-2007-OS/CD, N° 360-2007-OS/CD.
3. CPSEE, Línea 220kV Zapallal-Chimbote1.

Peaje de Conexión al Sistemas Principal de Transmisión
Resoluciones OSINERGMIN N° 341-2008-OS/CD, N° 462-2008-OS/CD.

04 DE JULIO DE 2008	
Sistema de Transmisión	PCSPT \$/kW-mes
SPT de REP	1.08
SPT de San Gabán	0.01
SPT de Antamina	0.01
SPT de Eteselva	0.17
SPT de Redesur	0.70
SPT de Transmataro	1.73
SPT de ISA	0.52
Garantía por Red Principal TGP	0.77
Garantía por Red Principal GNLC	0.05
	5.04

Peaje Secundario por Transmisión Equivalente en energía de la Subestaciones Base
Resoluciones OSINERG N° 065-2005-OS/CD, N° 146-2005-OS/CD

04 DE JULIO DE 2008			
Subestaciones Base	Tensión kV	Instalaciones Secundarias	CPSEE01 ctm. \$/kW.h
Paragsha II	138	S.E. Oroya Nueva - Transformación 220/50/13.8 kV	0.0844
Oroya Nueva	220		
Oroya Nueva	50		
Carhuamayo	138		
Caripa	138	SST Transformación Oroya Nueva 220/50/13.8 kV	0.0844
Condorcocha	44		
Montalvo	220	SST Caripa - Condorcocha, S.E. Condorcocha 138/44 kV	0.5139
Montalvo	138		
Ilo	138	SST de Enersur	0.4390
Botiflaca	138		
Toquepala	138		
Arequipa	138		
Cajamarquilla	220	SST Santuario - Chilina 138 kV	0.1151
Paramonga Existente	138	SST Celda de Transformación 220kV - S.E. Cajamarquilla	0.0666
			0.0363

Peaje Secundario por Transmisión Equivalente en energía de la Subestaciones Base
Resoluciones OSINERGMIN N° 169-2007-OS/CD, N° 360-2007-OS/CD, N° 342-2008-OS/CD, N° 463-2008-OS/CD, N° 577-2008-OS/CD

04 DE JULIO DE 2008			
Subestaciones Base	Tensión kV	Instalaciones Secundarias	CPSEE ctm. \$/kW.h
Tacna	66	S.E. Tacna - Transf. 220/66/10 kV 50 MVA	0.5145
Pucallpa	60	L.T. Aguytia-Pucallpa, S.E. Aguytia 220/138/22.9 kV, S.E. Pucallpa 138/60/10 kV y Reactor 8 MVar	2.0824
Paramonga Existente	138	SST Paramonga Nueva 220/138kV	0.1296
Ica	220	SST Independencia - Ica 220kV	0.1547
Marcona	220	SST Independencia - Ica 220kV	0.1547
		SST Ica - Marcona 220kV	0.7357
		Total	0.8904

PRECIOS A NIVEL GENERACIÓN EN SUBESTACIONES BASE

04 DE JULIO DE 2008				
	TENSIÓN	PPB	PEBP	PEBF
	kV	\$/kW-mes	ctm. \$/kW.h	ctm. \$/kW.h
SISTEMA ELÉCTRICO INTERCONECTADO NACIONAL				
Talara	220	19.51	9.63	7.80
Piura Oeste	220	20.01	9.89	7.98
Chiclayo Oeste	220	19.80	10.02	8.06
Guadalupe	220	19.78	10.15	8.17
Guadalupe60	60	19.75	10.16	8.18
Trujillo Norte	220	19.68	10.22	8.20
Chimbote 1	220	19.41	10.11	8.13
Paramonga	220	19.47	10.10	7.97
Paramonga138	138	19.41	10.23	8.12
Huacho	220	19.51	10.28	7.98
Zapallal	220	19.53	10.41	7.96
Ventanilla	220	19.55	10.57	7.97
Lima	220	19.65	10.90	8.14
Cantera	220	19.56	10.67	8.12
Desierto	220	19.54	10.57	8.10
Chilca	220	19.54	10.96	8.14
Independencia	220	19.54	10.36	8.08
Ica	220	19.80	10.60	8.31
Marcona	220	20.39	11.50	9.18
Mantaro	220	18.97	9.30	7.81
Huayucachi	220	19.14	9.75	7.86
Pachachaca	220	19.24	9.24	7.93
Huancavelica	220	19.12	9.59	7.89
Callahuanca	220	19.36	10.06	8.01
Cajamarquilla	220	19.56	10.59	8.16
Huallanca	138	18.54	9.70	7.86
Viczarra	220	19.45	9.70	7.88
Tingo Maria	220	19.27	9.43	7.67
Aguytia	220	19.15	9.31	7.57
Pucallpa	60	19.88	11.56	9.74
Tingo Maria138	138	19.25	9.37	7.66
Huánuco	138	19.39	9.42	7.79
Paragsha II	138	19.34	9.49	7.94
Oroya Nueva220	220	19.24	9.35	8.00
Oroya Nueva50	50	19.33	9.43	8.03
Carhuamayo138	138	19.40	9.50	7.97
Carhuamayo Nueva	220	19.11	9.30	7.82
Caripa	138	19.42	9.49	8.01
Condorcocha44	44	19.56	10.02	8.54
Machupicchu	138	18.96	9.92	7.81
Cachimayo	138	19.70	9.19	8.07
Cusco	138	19.64	9.22	8.08
Combapata	138	19.90	9.38	8.29
Tintaya	138	20.09	9.57	8.52
Ayaviri	138	19.65	9.37	8.37
Azángaro	138	19.40	9.27	8.29
Julica	138	20.08	9.60	8.54
Puno138	138	20.29	9.70	8.66
Puno220	220	20.31	9.72	8.66
Callalli	138	20.18	9.69	8.64
Santuario	138	20.18	9.73	8.66
Arequipa	138	20.31	9.91	8.82
Socabaya220	220	20.32	9.80	8.70
Cerro Verde	138	20.39	9.82	8.73
Repartición	138	20.48	9.85	8.74
Mollendo	138	20.56	9.85	8.74
Montalvo220	220	20.46	10.25	9.20
Montalvo	138	20.47	10.25	9.20
Ilo	138	20.65	10.32	9.25
Botiflaca	138	20.65	10.31	9.24
Toquepala	138	20.68	10.32	9.27
Aricota138	138	20.62	9.82	8.80
Aricota66	66	20.58	9.80	8.79
Tacna220 (SE Los Héroes)	220	20.56	9.85	8.78
Tacna66 (SE Los Héroes)	66	20.81	10.41	9.32
SISTEMAS AISLADOS				
Adinelsa	MT	21.92	19.77	19.77
Chavimochic	MT	21.92	19.77	19.77
Edelnor	MT	21.92	19.77	19.77
Edelsa	MT	21.92	19.77	19.77
Egepsa	MT	21.92	19.77	19.77
Electro Oriente	MT	23.79	26.20	26.20
Electro Pangoa	MT	21.92	19.77	19.77
Electro Puno	MT	26.56	36.89	36.89
Electro Sur Este	MT	26.84	41.08	41.08
Electro Sur Medio	MT	26.56	36.89	36.89
Electro Ucayali	MT	21.92	19.77	19.77
Electrocentro	MT	21.92	19.77	19.77
El Comorte	MT	22.07	19.00	19.25
Enseada	MT	22.63	17.09	17.09
Grandina	MT	21.94	19.86	19.86
Islal	MT	24.52	30.30	30.30
Itersa	MT	23.84	26.45	26.45