

TARIFAS EN BARRA ACTUALIZADAS EN SUBESTACIONES BASE

TARIFAS EN BARRA ACTUALIZADAS EN SUBESTACIONES BASE

04 DE AGOSTO 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 \$/kW-mes	PEMP ctm. \$/kW.h	PEMF ctm. \$/kW.h	PCSPT ¹ \$/kW-mes	CPSEE ² ctm. \$/kW.h	CPSEE ² ctm. \$/kW.h
SISTEMA ELÉCTRICO INTERCONECTADO NACIONAL							
Talara	220	14.09	12.87	9.47	4.79	0.0075	
Piura Oeste	220	14.15	12.99	9.56	4.79	0.0075	
Chiclayo Oeste	220	14.02	13.06	9.61	4.79	0.0075	
Guadalupe	220	14.01	13.14	9.66	4.79	0.0075	
Guadalupe60	60	13.99	13.17	9.68	4.79	0.0075	
Trujillo Norte	220	13.95	13.15	9.67	4.79	0.0075	
Chimbote 1	220	13.77	12.96	9.55	4.79	0.0075	
Paramonga	220	13.81	12.76	9.32	4.79	0.0075	
Paramonga138	138	13.77	13.40	9.91	4.79	0.0075	0.16
Huacho	220	13.84	12.77	9.31	4.79	0.0075	
Zapallal	220	13.85	12.75	9.27	4.79	0.0075	
Ventanilla	220	13.87	12.74	9.27	4.79	0.0075	
Lima	220	13.93	12.76	9.29	4.79	0.0075	
Cantera	220	13.87	12.66	9.27	4.79	0.0075	
Desierto	220	13.86	12.07	9.07	4.79	0.0075	
Chilca	220	13.86	12.64	9.23	4.79	0.0075	
Independencia	220	13.86	12.69	9.31	4.79	0.0075	
Ica	220	14.02	12.84	9.42	4.79	0.0075	0.15
Marcona	220	14.40	13.11	9.61	4.79	0.0075	0.88
Mantaro	220	13.50	12.37	9.06	4.79	0.0075	
Huayucachi	220	13.60	12.49	9.13	4.79	0.0075	
Pachachaca	220	13.66	12.52	9.15	4.79	0.0075	
Huancavelica	220	13.59	12.45	9.13	4.79	0.0075	
Callahuauca	220	13.74	12.41	9.20	4.79	0.0075	
Cajamarquilla	220	13.87	12.73	9.27	4.79	0.0075	0.06
Huallanca	138	13.22	12.44	9.25	4.79	0.0075	
Vizcarra	220	13.80	12.57	9.19	4.79	0.0075	
Tingo María	220	13.68	12.28	8.95	4.79	0.0075	
Aguyayta	220	13.61	12.13	8.83	4.79	0.0075	
Pucallpa	60	14.07	12.37	8.97	4.79	0.0075	1.98
Tingo María138	138	13.67	12.28	8.94	4.79	0.0075	
Huánuco	138	13.76	12.48	9.08	4.79	0.0075	
Paragsha II	138	13.73	12.50	9.15	4.79	0.0075	0.08
Oroya Nueva220	220	13.66	12.51	9.16	4.79	0.0075	0.08
Oroya Nueva50	50	13.72	12.56	9.20	4.79	0.0075	0.08
Carhuamayo138	138	13.77	12.60	9.19	4.79	0.0075	0.08
Carhuamayo Nueva	220	13.59	12.41	9.09	4.79	0.0075	
Caripa	138	13.78	12.68	9.25	4.79	0.0075	0.08
Condorcocha44	44	13.87	12.70	9.27	4.79	0.0075	0.59
Machupicchu	138	13.49	12.90	9.21	4.79	0.0075	
Cachimayo	138	13.95	13.30	9.52	4.79	0.0075	
Cusco	138	13.92	13.30	9.52	4.79	0.0075	
Combapata	138	14.09	13.38	9.68	4.79	0.0075	
Tintaya	138	14.21	13.43	9.87	4.79	0.0075	
Ayaviri	138	13.93	13.17	9.69	4.79	0.0075	
Azángaro	138	13.77	13.03	9.59	4.79	0.0075	
Julica	138	14.21	13.37	9.85	4.79	0.0075	
Puno138	138	14.34	13.47	9.96	4.79	0.0075	
Puno220	220	14.35	13.48	9.97	4.79	0.0075	
Callalli	138	14.27	13.49	9.95	4.79	0.0075	
Santuario	138	14.26	13.34	9.87	4.79	0.0075	
Arequipa	138	14.35	13.41	9.91	4.79	0.0075	0.11
Socabaya220	220	14.36	13.40	9.91	4.79	0.0075	
Cerro Verde	138	14.39	13.45	9.93	4.79	0.0075	
Repartición	138	14.45	13.49	9.97	4.79	0.0075	
Mollendo	138	14.50	13.50	9.98	4.79	0.0075	
Montalvo220	220	14.44	13.53	10.03	4.79	0.0075	0.43
Montalvo	138	14.44	13.54	10.04	4.79	0.0075	0.43
Ilo	138	14.57	13.66	10.15	4.79	0.0075	0.43
Botiflaca	138	14.57	13.63	10.11	4.79	0.0075	0.43
Toquepala	138	14.59	13.63	10.14	4.79	0.0075	0.43
Aricota138	138	14.55	13.52	10.12	4.79	0.0075	
Aricota66	66	14.51	13.47	10.12	4.79	0.0075	
Tacna220 (SE Los Héroes)	220	14.50	13.57	10.07	4.79	0.0075	
Tacna66 (SE Los Héroes)	66	14.67	13.63	10.09	4.79	0.0075	0.49
SISTEMAS AISLADOS							
Adinelsa	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			

Peaje de Conexión al Sistemas Principal de Transmisión

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

04 DE AGOSTO DE 2008

Sistema de Transmisión	PCSPT \$/kW-mes
SPT de REP	1.03
SPT de San Gabán	0.01
SPT de Antamina	0.01
SPT Eteselva	0.17
SPT de Redesur	0.67
SPT de Transmataro	1.64
SPT de ISA	0.49
Garantía por Red Principal TGP	0.73
Garantía por Red Principal GNLC	0.05
	4.79

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 AGOSTO DE 2008

Subestaciones Base	Tensión kV	Instalaciones Secundarias	CPSEE01 ctm. \$/kW.h
Paragsha II	138		
Oroya Nueva	220		
Oroya Nueva	50	S.E. Oroya Nueva - Transformación 220/50/13,8 kV	0.0835
Carhuamayo	138		
Caripa	138		
Condorcocha	44	SST Transformación Oroya Nueva 220/50/13,8 kV	0.0835
Montalvo	220	SST Caripa - Condorcocha, S.E. Condorcocha 138/44 kV	0.5081
Montalvo	138		
Ilo	138	SST de Enersur	0.4284
Botiflaca	138		
Toquepala	138		
Arequipa	138	SST Santuario - Chilina 138 kV	0.1140
Cajamarquilla	220	SST Celda de Transformación 220kV - S.E. Cajamarquilla	0.0648
Paramonga Existente	138	SST Paramonga Nueva-Paramonga Existente	0.0360

Peaje Secundario por Transmisión Equivalente en energía de la Subestaciones Base

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

04 DE AGOSTO DE 2008

Subestaciones Base	Tensión kV	Instalaciones Secundarias	CPSEE ctm. \$/kW.h
Tacna	66	S.E. Tacna - Transf. 220/66/10 kV 50 MVA	0.4884
Pucallpa	60	L.T. Aguyayta-Pucallpa, S.E. Aguyayta 220/138/22,9 kV, S.E. Pucallpa 138/60/10 kV y Reactor 8 MVAR	1.9765
Paramonga Existente	138	SST Paramonga Nueva 220/138kV	0.1286
Ica	220	SST Independencia - Ica 220kV	0.1535
Marcona	220	SST Independencia - Ica 220kV	0.1535
		SST Ica - Marcona 220kV	0.7299
		Total	0.8834

PRECIOS EN BARRA EN SUBESTACIONES BASE

04 DE AGOSTO DE 2008

	TENSIÓN kV	PPB \$/kWh-mes	PEBP* ctm. \$/kWh	PEBF* ctm. \$/kWh
SISTEMA ELÉCTRICO INTERCONECTADO NACIONAL				
Talara	220	18.88	12.88	9.47
Piura Oeste	220	18.95	13.00	9.57
Chiclayo Oeste	220	18.81	13.07	9.61
Guadalupe	220	18.80	13.15	9.67
Guadalupe60	60	18.78	13.18	9.69
Trujillo Norte	220	18.74	13.16	9.68
Chimbote I	220	18.56	12.96	9.56
Paramonga	220	18.61	12.77	9.33
Paramonga138	138	18.56	13.57	10.08
Huacho	220	18.63	12.78	9.32
Zapallal	220	18.64	12.76	9.28
Ventanilla	220	18.66	12.74	9.28
Lima	220	18.72	12.77	9.30
Cantera	220	18.66	12.67	9.28
Desierto	220	18.65	11.86	9.08
Chilca	220	18.65	12.65	9.23
Independencia	220	18.65	12.70	9.32
Ica	220	18.81	13.00	9.58
Marcona	220	19.19	14.00	10.50
Mantaro	220	18.29	12.37	9.07
Huayucachi	220	18.39	12.49	9.13
Pachachaca	220	18.45	12.53	9.16
Huancavelica	220	18.38	12.46	9.13
Callahuasca	220	18.53	12.61	9.21
Cajamarquilla	220	18.66	12.80	9.34
Huallanca	138	18.01	12.45	9.25
Vizcarra	220	18.60	12.58	9.20
Tingo María	220	18.47	12.29	8.96
Aguyayta	220	18.40	12.13	8.84
Pucallpa	60	18.86	14.35	10.96
Tingo María138	138	18.46	12.29	8.95
Huánuco	138	18.55	12.48	9.09
Paragsha II	138	18.52	12.59	9.24
Oroya Nueva220	220	18.45	12.60	9.25
Oroya Nueva50	50	18.51	12.65	9.29
Carhuamayo138	138	18.56	12.69	9.28
Carhuamayo Nueva	220	18.38	12.42	9.10
Caripa	138	18.57	12.77	9.34
Condorcocha44	44	18.66	13.30	9.87
Machupicchu	138	18.28	12.91	9.22
Cachimayo	138	18.74	13.31	9.53
Cusco	138	18.71	13.31	9.53
Combapata	138	18.88	13.39	9.69
Tintaya	138	19.00	13.44	9.88
Ayaviri	138	18.72	13.18	9.70
Azángaro	138	18.56	13.04	9.59
Julica	138	19.00	13.38	9.85
Puno138	138	19.13	13.48	9.96
Puno220	220	19.14	13.49	9.97
Callalli	138	19.06	13.50	9.95
Santuario	138	19.05	13.34	9.88
Arequipa	138	19.14	13.53	10.03
Socabaya220	220	19.15	13.41	9.92
Cerro Verde	138	19.18	13.45	9.94
Repartición	138	19.24	13.50	9.97
Mollendo	138	19.30	13.51	9.99
Montalvo220	220	19.23	13.97	10.47
Montalvo	138	19.23	13.98	10.48
Ilo	138	19.36	14.10	10.59
Botiflaca	138	19.36	14.07	10.54
Toquepala	138	19.38	14.07	10.58
Aricota138	138	19.34	13.53	10.13
Aricota66	66	19.31	13.48	10.13
Tacna220 (SE Los Héroes)	220	19.30	13.57	10.07
Tacna66 (SE Los Héroes)	66	19.46	14.13	10.58
SISTEMAS AISLADOS				
Adelaida	MT	21.79	22.94	22.94
Chavinopichic	MT	21.79	22.94	22.94
Edelner	MT	21.79	22.94	22.94
Edelisa	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
Elmadranda	MT	21.80	22.17	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 AGOSTO DE 2008

Resoluciones OSINERGMIN N° 581-2008-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

	TENSIÓN kV	PPM \$/kW-mes	PEMP ctm. \$/kW.h	PEMF ctm. \$/kW.h	PCSPT ¹ \$/kW-mes	CPSEE ³ ctm. \$/kW.h	CPSEE ² ctm. \$/kW.h
SISTEMA ELÉCTRICO INTERCONECTADO NACIONAL							
Talara	220	14.02	10.31	7.68	4.79	0.0075	
Piura Oeste	220	14.08	10.41	7.77	4.79	0.0075	
Chiclayo Oeste	220	13.95	10.48	7.81	4.79	0.0075	
Guadalupe	220	13.94	10.54	7.86	4.79	0.0075	
Guadalupe60	60	13.92	10.57	7.88	4.79	0.0075	
Trujillo Norte	220	13.88	10.55	7.87	4.79	0.0075	
Chimbote 1	220	13.70	10.38	7.76	4.79	0.0075	
Paramonga	220	13.75	10.21	7.55	4.79	0.0075	
Paramonga138	138	13.70	10.77	8.09	4.79	0.0075	0.16
Huacho	220	13.77	10.22	7.54	4.79	0.0075	
Zapallal	220	13.78	10.20	7.50	4.79	0.0075	
Ventanilla	220	13.80	10.19	7.50	4.79	0.0075	
Lima	220	13.86	10.21	7.52	4.79	0.0075	
Cantera	220	13.80	10.12	7.50	4.79	0.0075	
Desierto	220	13.79	9.42	7.33	4.79	0.0075	
Chilca	220	13.79	10.11	7.46	4.79	0.0075	
Independencia	220	13.79	10.15	7.54	4.79	0.0075	
Ica	220	13.95	10.28	7.64	4.79	0.0075	0.15
Marcona	220	14.33	10.52	7.81	4.79	0.0075	0.88
Mantaro	220	13.43	9.87	7.32	4.79	0.0075	
Huayucachi	220	13.53	9.97	7.38	4.79	0.0075	
Pachachaca	220	13.59	10.00	7.40	4.79	0.0075	
Huancavelica	220	13.52	9.94	7.38	4.79	0.0075	
Callahuanca	220	13.67	10.08	7.45	4.79	0.0075	
Cajamarquilla	220	13.80	10.18	7.50	4.79	0.0075	0.06
Huallanca	138	13.15	9.93	7.48	4.79	0.0075	
Vizcarra	220	13.74	10.05	7.44	4.79	0.0075	
Tingo María	220	13.61	9.79	7.22	4.79	0.0075	
Aguyayta	220	13.54	9.66	7.11	4.79	0.0075	
Pucallpa	60	14.00	9.87	7.24	4.79	0.0075	1.98
Tingo María138	138	13.60	9.79	7.21	4.79	0.0075	
Huánuco	138	13.69	9.96	7.34	4.79	0.0075	
Paragsha II	138	13.66	9.98	7.40	4.79	0.0075	0.08
Oroya Nueva220	220	13.59	9.99	7.41	4.79	0.0075	0.08
Oroya Nueva50	50	13.65	10.04	7.45	4.79	0.0075	0.08
Carhuamayo138	138	13.70	10.07	7.44	4.79	0.0075	0.08
Carhuamayo Nueva	220	13.52	9.91	7.35	4.79	0.0075	
Caripa	138	13.71	10.14	7.48	4.79	0.0075	0.08
Condorcocha44	44	13.80	10.16	7.50	4.79	0.0075	0.59
Machupicchu	138	13.42	10.33	7.46	4.79	0.0075	
Cachimayo	138	13.88	10.69	7.73	4.79	0.0075	
Cusco	138	13.85	10.69	7.73	4.79	0.0075	
Combapata	138	14.02	10.75	7.88	4.79	0.0075	
Tintaya	138	14.13	10.80	8.05	4.79	0.0075	
Ayaviri	138	13.86	10.57	7.89	4.79	0.0075	
Azángaro	138	13.70	10.45	7.79	4.79	0.0075	
Julica	138	14.13	10.74	8.03	4.79	0.0075	0.43
Puno138	138	14.27	10.83	8.13	4.79	0.0075	
Puno220	220	14.28	10.84	8.14	4.79	0.0075	
Callalli	138	14.20	10.85	8.12	4.79	0.0075	
Santuario	138	14.19	10.72	8.05	4.79	0.0075	
Arequipa	138	14.28	10.78	8.09	4.79	0.0075	0.11
Socabaya220	220	14.29	10.77	8.09	4.79	0.0075	
Cerro Verde	138	14.32	10.81	8.11	4.79	0.0075	
Repartición	138	14.38	10.85	8.14	4.79	0.0075	
Mollendo	138	14.43	10.86	8.15	4.79	0.0075	
Montalvo220	220	14.37	10.89	8.20	4.79	0.0075	0.43
Montalvo	138	14.37	10.90	8.21	4.79	0.0075	0.43
Ilo	138	14.49	11.00	8.31	4.79	0.0075	0.43
Botiflaca	138	14.49	10.97	8.27	4.79	0.0075	0.43
Toquepala	138	14.51	10.97	8.30	4.79	0.0075	
Ancota138	138	14.47	10.88	8.28	4.79	0.0075	
Ancota66	66	14.44	10.83	8.28	4.79	0.0075	
Tacna220 (SE Los Héroes)	220	14.43	10.92	8.23	4.79	0.0075	
Tacna66 (SE Los Héroes)	66	14.60	10.97	8.25	4.79	0.0075	0.49
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 AGOSTO DE 2008

Sistema de Transmisión	PCSPT \$/kW-mes
SPT de REP	1.03
SPT de San Gabán	0.01
SPT de Antamina	0.01
SPT Eteselva	0.17
SPT de Redesur	0.67
SPT de Transmataro	1.64
SPT de ISA	0.49
Garantía por Red Principal TGP	0.73
Garantía por Red Principal GNLC	0.05
	4.79

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 AGOSTO DE 2008

Subestaciones Base	Tensión kV	Instalaciones Secundarias	CPSEE01 ctm. \$/kW.h
Paragsha II	138		
Oroya Nueva	220		
Oroya Nueva	50	S.E. Oroya Nueva - Transformación 220/50/13.8 kV	0.0835
Carhuamayo	138		
Caripa	138		
Condorcocha	44	SST Transformación Oroya Nueva 220/50/13.8 kV	0.0835
Montalvo	220	SST Caripa - Condorcocha, S.E. Condorcocha 138/44 kV	0.5081
Montalvo	138		
Ilo	138	SST de Enesur	0.4284
Botiflaca	138		
Toquepala	138		
Arequipa	138	SST Santuario - Chilina 138 kV	0.1140
Cajamarquilla	220	SST Celda de Transformación 220kV - S.E. Cajamarquilla	0.0648
Paramonga Existente	138	SST Paramonga Nueva-Paramonga Existente	0.0360

Peaje Secundario por Transmisión Equivalente en energía de la Subestaciones Base

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

04 DE AGOSTO DE 2008

Subestaciones Base	Tensión kV	Instalaciones Secundarias	CPSEE ctm. \$/kW.h
Tacna	66	S.E. Tacna - Transf. 220/66/10 kV 50 MVA	0.4884
Pucallpa	60	L.T. Aguaytia-Pucallpa, S.E. Aguaytia 220/138/22.9 kV, S.E. Pucallpa 138/60/10 kV y Reactor 8 MVAr	1.9765
Paramonga Existente	138	SST Paramonga Nueva 220/138kV	0.1286
Ica	220	SST Independencia - Ica 220kV	0.1535
		SST Independencia - Ica 220kV	0.1535
Marcona	220	SST Ica - Marcona 220kV	0.7299
		Total	0.8834

PRECIOS A NIVEL GENERACIÓN EN SUBESTACIONES BASE

04 DE AGOSTO DE 2008

	TENSIÓN	PPB	PEBP	PEBF
	kV	\$/kW-mes	ctm. \$/kW.h	ctm. \$/kW.h
SISTEMA ELÉCTRICO INTERCONECTADO NACIONAL				
Talara	220	18.81	10.32	7.69
Piura Oeste	220	18.87	10.42	7.78
Chiclayo Oeste	220	18.74	10.49	7.82
Guadalupe	220	18.73	10.55	7.87
Guadalupe60	60	18.71	10.58	7.89
Trujillo Norte	220	18.67	10.56	7.88
Chimbote 1	220	18.49	10.39	7.77
Paramonga	220	18.54	10.22	7.56
Paramonga138	138	18.49	10.94	8.26
Huacho	220	18.56	10.23	7.55
Zapallal	220	18.57	10.21	7.51
Ventanilla	220	18.59	10.20	7.51
Lima	220	18.65	10.22	7.53
Cantera	220	18.59	10.13	7.51
Desierto	220	18.58	9.43	7.34
Chilca	220	18.58	10.12	7.47
Independencia	220	18.58	10.16	7.55
Ica	220	18.74	10.44	7.80
Marcona	220	19.12	11.41	8.70
Mantaro	220	18.22	9.88	7.33
Huayucachi	220	18.32	9.98	7.39
Pachachaca	220	18.38	10.01	7.41
Huancavelica	220	18.31	9.95	7.39
Callahuanca	220	18.46	10.09	7.46
Cajamarquilla	220	18.59	10.25	7.57
Huallanca	138	17.94	9.94	7.49
Vizcarra	220	18.53	10.06	7.45
Tingo María	220	18.40	9.80	7.23
Aguaytia	220	18.33	9.67	7.12
Pucallpa	60	18.79	11.85	9.22
Tingo María138	138	18.39	9.80	7.22
Huánuco	138	18.48	9.97	7.35
Paragsha II	138	18.45	10.07	7.49
Oroya Nueva220	220	18.38	10.08	7.50
Oroya Nueva50	50	18.44	10.13	7.54
Carhuamayo138	138	18.49	10.16	7.53
Carhuamayo Nueva	220	18.31	9.92	7.36
Caripa	138	18.50	10.23	7.57
Condorcocha44	44	18.59	10.76	8.10
Machupicchu	138	18.21	10.34	7.47
Cachimayo	138	18.67	10.70	7.74
Cusco	138	18.64	10.70	7.74
Combapata	138	18.81	10.76	7.89
Tintaya	138	18.92	10.81	8.06
Ayaviri	138	18.65	10.58	7.90
Azángaro	138	18.49	10.46	7.80
Julica	138	18.92	10.75	8.04
Puno138	138	19.06	10.84	8.14
Puno220	220	19.07	10.85	8.15
Callalli	138	18.99	10.86	8.13
Santuario	138	18.98	10.73	8.06
Arequipa	138	19.07	10.90	8.21
Socabaya220	220	19.08	10.78	8.10
Cerro Verde	138	19.11	10.82	8.12
Repartición	138	19.17	10.86	8.15
Mollendo	138	19.22	10.87	8.16
Montalvo220	220	19.16	11.33	8.64
Montalvo	138	19.16	11.34	8.65
Ilo	138	19.28	11.44	8.75
Botiflaca	138	19.28	11.41	8.71
Toquepala	138	19.30	11.41	8.74
Ancota138	138	19.26	10.89	8.29
Ancota66	66	19.23	10.84	8.29
Tacna220 (SE Los Héroes)	220	19.22	10.83	8.24
Tacna66 (SE Los Héroes)	66	19.39	11.47	8.75
SISTEMAS AISLADOS				
Adinela	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
Egessa	MT	21.92	19.77	19.77
Electro Oriente	MT	23.79	26.20	26.20
Electro Pango	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
Elguasa	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