



INSTITUTO NICARAGÜENSE DE ENERGÍA  
ENTE REGULADOR

RESUMEN DE LOS PRINCIPALES INDICADORES DEL SUBSECTOR ELECTRICIDAD  
SISTEMA INTERCONECTADO NACIONAL (S.I.N.) Y SISTEMAS AISLADOS  
AÑO 2013

Conceptos	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago	Sep	Oct	Nov	Dic	Annual
<b>Capacidad Instalada Nominal (MW)</b>	1,276.91	1,276.91	1,276.91	1,276.91	1,276.91	1,276.73	1,276.73	1,277.03	1,277.03	1,291.43	1,291.43	1,291.43	1,291.43
<b>Sistema Interconectado Nacional (S.I.N.)</b>	<b>364,237.35</b>	<b>337,418.74</b>	<b>374,354.73</b>	<b>381,060.68</b>	<b>376,978.79</b>	<b>324,144.09</b>	<b>328,733.93</b>	<b>325,609.46</b>	<b>290,422.44</b>	<b>319,462.82</b>	<b>327,084.84</b>	<b>355,892.47</b>	<b>4,105,400.34</b>
Biomasa	72,830.91	65,857.93	71,202.86	65,727.31	47,842.06	29,542.77	19,366.27	7,568.59	0.00	6.51	28,422.18	73,740.37	482,107.76
Eólica	88,268.94	71,416.79	75,344.21	65,143.24	42,861.78	30,434.64	41,395.93	29,234.63	6,474.14	18,270.66	30,972.77	61,753.39	561,571.10
Geotérmica	54,503.08	49,978.82	65,915.88	62,542.88	62,272.88	59,047.40	58,813.47	55,811.85	55,766.57	54,234.99	49,273.24	51,201.37	679,362.43
Hidroeléctrica	24,467.93	25,648.23	28,918.75	16,890.99	25,719.16	29,768.23	39,528.81	45,243.41	56,052.72	49,605.92	58,074.74	54,666.59	454,585.47
Solar	91.91	83.02	91.91	88.95	21.92	57.92	62.97	42.91	19.28	28.28	49.41	37.94	676.42
Térmica	124,074.58	124,433.95	132,881.12	170,667.32	198,260.99	175,293.13	169,566.48	187,708.09	172,109.74	197,316.46	160,292.51	114,492.80	1,927,097.16
<b>Sistema Aislado Nacional (S.A.N.)</b>	<b>4,477.50</b>	<b>4,085.15</b>	<b>4,387.85</b>	<b>4,518.03</b>	<b>4,582.67</b>	<b>4,302.46</b>	<b>4,661.82</b>	<b>4,728.35</b>	<b>4,560.82</b>	<b>4,579.77</b>	<b>4,374.54</b>	<b>4,637.35</b>	<b>53,896.30</b>
Hidroeléctrica	137.02	116.55	126.65	93.16	103.85	79.96	76.63	116.54	150.14	148.86	164.81	164.66	1,478.82
Térmica	4,340.48	3,968.59	4,261.20	4,424.87	4,478.82	4,222.50	4,585.19	4,611.81	4,410.68	4,430.90	4,209.73	4,472.69	52,417.48
<b>Generación Bruta (MWh)</b>	<b>368,714.84</b>	<b>341,503.88</b>	<b>378,742.58</b>	<b>385,578.71</b>	<b>381,561.46</b>	<b>328,446.55</b>	<b>333,395.75</b>	<b>330,337.81</b>	<b>294,983.26</b>	<b>324,042.59</b>	<b>331,459.38</b>	<b>360,529.81</b>	<b>4,159,296.63</b>
<b>Sistema Interconectado Nacional (S.I.N.)</b>	<b>44,982.45</b>	<b>41,613.69</b>	<b>47,736.59</b>	<b>45,894.07</b>	<b>34,781.20</b>	<b>18,622.60</b>	<b>17,137.84</b>	<b>14,653.91</b>	<b>12,994.18</b>	<b>13,628.40</b>	<b>25,364.79</b>	<b>42,685.69</b>	<b>360,095.41</b>
Biomasa	33,035.33	30,526.65	34,449.42	32,725.38	21,312.30	6,084.09	4,123.85	1,367.17	0.00	2.99	12,721.31	30,579.56	206,928.04
Eólica	894.55	837.79	879.16	681.12	463.12	312.41	459.41	338.71	239.77	308.15	399.21	762.54	6,575.91
Geotérmica	5,526.82	4,886.21	6,355.58	6,167.63	6,235.75	6,184.50	6,314.89	6,149.17	5,965.09	6,145.87	5,991.41	6,127.25	72,050.17
Hidroeléctrica	374.88	390.01	416.99	270.32	382.64	444.39	557.49	613.25	757.63	648.13	772.03	727.18	6,354.93
Solar	3.69	3.34	3.69	3.57	2.38	2.70	2.67	1.92	0.96	1.30	1.99	1.68	29.89
Térmica	5,147.19	4,969.69	5,631.75	6,046.06	6,385.02	5,594.51	5,679.53	6,183.69	6,030.73	6,521.96	5,478.84	4,487.50	68,156.47
<b>Sistema Aislado Nacional (S.A.N.)</b>	<b>216.09</b>	<b>199.61</b>	<b>219.29</b>	<b>223.51</b>	<b>231.78</b>	<b>220.29</b>	<b>235.05</b>	<b>241.37</b>	<b>231.98</b>	<b>236.35</b>	<b>220.38</b>	<b>230.47</b>	<b>2,706.15</b>
Hidroeléctrica	0.60	0.50	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	7.10
Térmica	215.49	199.11	218.69	222.91	231.18	219.69	234.45	240.77	231.38	235.75	219.78	229.87	2,699.05
<b>Consumo Propio (MWh)</b>	<b>45,198.54</b>	<b>41,813.29</b>	<b>47,955.88</b>	<b>46,117.58</b>	<b>35,012.98</b>	<b>18,842.89</b>	<b>17,372.88</b>	<b>14,895.28</b>	<b>13,226.15</b>	<b>13,864.75</b>	<b>25,585.17</b>	<b>42,916.16</b>	<b>362,801.56</b>
<b>Sistema Interconectado Nacional (S.I.N.)</b>	<b>319,254.89</b>	<b>295,805.05</b>	<b>326,618.14</b>	<b>335,166.61</b>	<b>342,197.59</b>	<b>305,521.49</b>	<b>311,596.09</b>	<b>310,955.55</b>	<b>277,428.27</b>	<b>305,834.42</b>	<b>301,720.05</b>	<b>313,206.77</b>	<b>3,745,304.92</b>
Biomasa	39,795.59	35,331.28	36,753.45	33,001.93	26,529.77	23,458.68	15,242.42	6,201.41	0.00	3.52	15,700.87	43,160.81	275,179.72
Eólica	87,374.39	70,579.01	74,465.05	64,462.12	42,398.66	30,122.23	40,936.53	28,895.92	6,234.37	17,962.50	30,573.56	60,990.85	554,995.19
Geotérmica	48,976.26	45,092.61	59,560.30	56,375.25	56,037.14	52,862.90	52,498.58	49,662.68	49,801.47	48,089.12	43,281.83	45,074.12	607,312.25
Hidroeléctrica	24,093.05	25,258.22	28,501.76	16,620.67	25,336.52	29,323.84	38,971.32	44,630.16	55,295.10	48,957.80	57,302.71	53,939.42	448,230.54
Solar	88.22	79.68	88.22	85.37	19.55	55.22	60.30	40.99	18.32	26.98	47.42	36.27	646.53
Térmica	118,927.39	119,464.26	127,249.37	164,621.26	191,875.96	169,698.62	163,886.95	181,524.40	166,079.01	190,794.50	154,813.66	110,005.31	1,858,940.69
<b>Sistema Aislado Nacional (S.A.N.)</b>	<b>4,261.41</b>	<b>3,885.54</b>	<b>4,168.56</b>	<b>4,294.52</b>	<b>4,350.89</b>	<b>4,082.17</b>	<b>4,426.77</b>	<b>4,486.98</b>	<b>4,328.84</b>	<b>4,343.42</b>	<b>4,154.16</b>	<b>4,406.88</b>	<b>51,190.15</b>
Hidroeléctrica	136.42	116.05	126.05	92.56	103.25	79.36	76.03	115.94	149.54	148.26	164.21	164.06	1,471.72
Térmica	4,124.99	3,769.49	4,042.51	4,201.96	4,247.64	4,002.81	4,350.74	4,371.04	4,179.31	4,195.16	3,989.95	4,242.82	49,718.43
<b>Generación Neta (MWh)</b>	<b>323,516.30</b>	<b>299,690.59</b>	<b>330,786.70</b>	<b>339,461.13</b>	<b>346,548.48</b>	<b>309,603.66</b>	<b>316,022.86</b>	<b>315,442.53</b>	<b>281,757.11</b>	<b>310,177.84</b>	<b>305,874.21</b>	<b>317,613.65</b>	<b>3,796,495.07</b>
<b>Oferta Total (MWh)</b>	<b>322,637.98</b>	<b>297,628.35</b>	<b>330,556.29</b>	<b>339,303.07</b>	<b>346,463.57</b>	<b>308,896.65</b>	<b>314,770.01</b>	<b>314,643.77</b>	<b>281,617.11</b>	<b>309,698.79</b>	<b>305,597.88</b>	<b>316,575.14</b>	<b>3,788,388.60</b>
<b>Oferta Disponible (SIN)</b>	<b>318,376.57</b>	<b>293,742.81</b>	<b>326,387.73</b>	<b>335,008.55</b>	<b>342,112.68</b>	<b>304,814.48</b>	<b>310,343.24</b>	<b>310,156.79</b>	<b>277,288.26</b>	<b>305,355.37</b>	<b>301,443.72</b>	<b>312,168.26</b>	<b>3,737,198.45</b>
<b>Oferta Disponible (Sistemas Aislados)</b>	<b>4,261.41</b>	<b>3,885.54</b>	<b>4,168.56</b>	<b>4,294.52</b>	<b>4,350.89</b>	<b>4,082.17</b>	<b>4,426.77</b>	<b>4,486.98</b>	<b>4,328.84</b>	<b>4,343.42</b>	<b>4,154.16</b>	<b>4,406.88</b>	<b>51,190.15</b>
Interconexión Neta	-878.32	-2,062.24	-230.41	-158.06	-84.91	-707.01	-1,252.85	-798.76	-140.01	-479.05	-276.34	-1,038.52	-8,106.47
Importaciones de Energía	1,410.00	0.00	0.00	3,491.00	0.00	1,295.00	4,477.10	5,609.10	14,028.00	13,516.72	7,697.88	429.74	51,954.55
<b>Pérdidas de Energía Eléctrica en Transmisión y Distribución (MWh)</b>													
Inyecciones Netas	319,636.10	295,202.38	325,857.66	338,111.76	341,318.75	311,318.90	318,311.23	323,042.84	300,916.86	321,478.53	310,443.77	322,459.80	3,828,098.59
Extracciones Netas	311,301.29	288,463.87	318,081.11	327,645.76	332,289.44	304,426.40	311,598.33	316,416.30	294,087.30	314,600.56	303,626.11	314,322.02	3,736,858.49
Pérdidas de Transmisión	8,334.80	6,738.51	7,776.56	10,466.00	9,029.31	6,892.50	6,712.91	6,626.55	6,829.56	6,877.97	6,817.65	8,137.78	91,240.10
Extracciones de Energía Sistema Interconectado (SIN)	300,032.91	277,844.48	305,238.36	312,920.10	311,077.04	287,953.62	296,766.37	303,276.98	282,455.22	299,777.17	290,489.26	300,015.32	3,567,846.81
Ventas de Energía Sistema Interconectado (SIN)	233,915.37	221,894.73	239,246.79	243,280.89	252,074.87	231,872.93	233,876.07	239,080.96	227,402.67	233,966.95	230,156.65	237,147.73	2,823,916.62
Pérdidas Distribución (Sistema Interconectado)	66,117.54	55,949.75	65,991.56	69,639.21	59,002.16	56,080.69	62,890.30	64,196.02	55,052.54	65,810.21	60,332.61	62,867.59	743,930.19
Pérdidas de Distribución (Sistemas Aislados)	1,711.28	1,472.43	1,733.69	1,901.12	1,843.73	1,486.62	1,951.95	2,017.69	1,697.39	1,632.00	1,600.00	1,735.95	20,783.86
Pérdidas de Transmisión	2.61%	2.28%	2.39%	3.10%	2.65%	2.21%	2.11%	2.05%	2.27%	2.14%	2.20%	2.52%	2.38%
Pérdidas de Distribución - SIN	22.04%	20.14%	21.62%	22.25%	18.97%	19.48%	21.19%	21.17%	19.49%	21.95%	20.77%	20.95%	20.85%
Pérdidas de Distribución - SAN	40.16%	37.90%	41.59%	44.27%	42.38%	36.42%	44.09%	44.97%	39.21%	37.57%	38.52%	39.39%	40.60%



RESUMEN DE LOS PRINCIPALES INDICADORES DEL SUBSECTOR ELECTRICIDAD  
SISTEMA INTERCONECTADO NACIONAL (S.I.N.) Y SISTEMAS AISLADOS  
AÑO 2013

Conceptos	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago	Sep	Oct	Nov	Dic	Annual
<b>Ventas de Energía Eléctrica (MWh)</b>	<b>244,925.54</b>	<b>232,056.74</b>	<b>251,099.56</b>	<b>257,180.23</b>	<b>272,429.04</b>	<b>242,480.22</b>	<b>244,582.61</b>	<b>249,517.12</b>	<b>237,475.04</b>	<b>245,012.82</b>	<b>240,962.38</b>	<b>248,852.60</b>	<b>2,966,573.90</b>
Sistema Interconectado Nacional - S.I.N.	241,872.41	229,178.41	247,386.70	251,339.34	260,478.20	239,679.65	241,770.79	247,028.43	234,833.38	242,301.41	238,366.68	245,704.87	2,919,940.26
Sistema Aislado Nacional - S.A.N.	2,550.13	2,413.11	2,434.87	2,393.40	2,507.16	2,595.55	2,474.82	2,469.29	2,631.46	2,711.41	2,554.16	2,670.93	30,406.28
Exportaciones de Energía	503.00	465.22	1,278.00	3,447.49	9,443.69	205.01	337.00	19.40	10.20	0.00	41.54	476.81	16,227.36
<b>Clientes</b>	<b>923,467</b>	<b>926,158</b>	<b>927,956</b>	<b>930,330</b>	<b>934,580</b>	<b>936,600</b>	<b>940,916</b>	<b>944,662</b>	<b>949,552</b>	<b>952,752</b>	<b>956,499</b>	<b>958,922</b>	<b>958,922</b>
Sistema Interconectado Nacional - S.I.N.	905,105	907,740	909,779	912,177	916,194	918,339	922,689	926,348	931,033	934,210	937,784	939,815	939,815
Sistema Aislado Nacional - S.A.N.	18,362	18,418	18,177	18,153	18,386	18,261	18,227	18,314	18,519	18,542	18,715	19,107	19,107
<b>Ingresos por Ventas de Energía Eléctrica (10<sup>3</sup> de C\$)</b>	<b>1,142,323.52</b>	<b>1,091,843.15</b>	<b>1,187,025.52</b>	<b>1,265,545.36</b>	<b>1,448,954.26</b>	<b>1,169,126.61</b>	<b>1,253,393.97</b>	<b>1,282,062.06</b>	<b>1,231,050.10</b>	<b>1,269,081.36</b>	<b>1,253,098.34</b>	<b>1,303,057.08</b>	<b>14,896,561.32</b>
Sistema Interconectado Nacional - S.I.N.	1,130,668.98	1,080,886.56	1,175,810.20	1,254,515.76	1,437,218.56	1,156,917.33	1,241,619.06	1,270,381.59	1,218,663.89	1,256,344.65	1,241,146.07	1,290,393.06	14,754,565.70
Sistema Aislado Nacional - S.A.N.	11,654.54	10,956.59	11,215.31	11,029.60	11,735.70	12,209.29	11,774.90	11,680.47	12,386.21	12,736.71	11,952.27	12,664.02	141,995.62
<b>Precio Promedio Nacional</b>	<b>5.8568</b>	<b>5.8818</b>	<b>5.9249</b>	<b>6.0542</b>	<b>6.4183</b>	<b>5.7100</b>	<b>6.0705</b>	<b>6.0768</b>	<b>6.0120</b>	<b>5.9826</b>	<b>6.0035</b>	<b>6.0527</b>	<b>6.0072</b>
Sistema Interconectado Nacional - S.I.N.	5.8677	5.8938	5.9355	6.0657	6.4332	5.7189	6.0819	6.0882	6.0247	5.9952	6.0162	6.0654	6.0191
Sistema Aislado Nacional - S.A.N.	4.8587	4.7805	4.8840	4.8891	4.9137	4.9104	4.9891	4.9693	4.9120	4.8950	4.8637	4.9259	4.8996
<b>Insumos para Generación de Energía Eléctrica</b>													
<b>Sistema Interconectado Nacional (S.I.N.)</b>													
<b>Biomasa</b>													
Miles de Toneladas Métricas de Bagazo Caña	245.41	221.80	239.58	234.43	145.70	64.36	16.81	12.10	0.00	0.00	103.08	270.49	1,553.78
Miles de Toneladas Métricas de Leña	0.00	0.00	0.00	0.00	0.00	4.13	9.66	0.00	0.00	0.32	5.33	0.00	19.43
<b>Geotérmica</b>													
Miles de Toneladas de Salmuera	729.12	658.56	729.12	705.60	729.12	705.60	729.12	712.80	705.60	729.12	691.20	650.65	8,475.61
Miles de Toneladas de Vapor Geotérmico	442.28	388.57	509.45	485.01	483.62	459.42	459.21	445.92	446.75	434.67	397.15	409.86	5,361.90
<b>Hidroeléctrica</b>													
Miles de Metros Cúbicos de Agua	45,069.71	46,541.61	52,495.14	30,682.09	46,991.69	55,981.67	73,402.97	83,848.55	105,905.99	86,585.83	102,917.77	95,259.23	825,682.25
<b>Térmica</b>													
Miles de Galones de Diesel	81.07	108.39	115.15	151.11	148.01	136.40	161.86	172.42	200.41	239.41	185.04	123.11	1,822.38
Miles de Galones de Fuel Oil	7,721.18	7,814.48	8,433.63	10,505.11	12,009.54	10,593.59	10,255.89	11,545.48	10,421.70	11,911.80	9,710.46	6,945.70	117,868.56
<b>Sistema Aislado Nacional (S.A.N.)</b>													
<b>Hidroeléctrica</b>													
Miles de Metros Cúbicos de Agua	324.59	276.83	304.86	287.10	296.65	269.54	289.52	328.14	329.57	319.50	305.29	329.66	3,661.24
<b>Térmica</b>													
Miles de Galones de Diesel	129.05	119.02	128.38	128.14	134.28	122.34	127.96	131.18	123.89	126.67	127.06	133.67	1,531.63
Miles de Galones de Fuel Oil	177.27	161.14	168.45	174.36	186.58	185.51	194.13	199.10	193.90	202.42	183.76	195.29	2,221.91
<b>Demanda Máxima del SIN - MW</b>	<b>551.19</b>	<b>571.02</b>	<b>586.23</b>	<b>589.93</b>	<b>593.96</b>	<b>562.39</b>	<b>565.27</b>	<b>553.59</b>	<b>573.97</b>	<b>576.62</b>	<b>568.00</b>	<b>583.50</b>	<b>593.96</b>
Hora	19:00:00	20:00:00	20:00:00	20:00:00	20:00:00	20:00:00	20:00:00	20:00:00	19:00:00	19:00:00	19:00:00	19:00:00	20:00:00
Fecha	08-ene-13	28-feb-13	18-mar-13	15-abr-13	15-may-13	27-jun-13	24-jul-13	20-ago-13	25-sep-13	17-oct-13	07-nov-13	17-dic-13	15-may-13
<b>Demanda Mínima del SIN - MW</b>	<b>299.50</b>	<b>310.30</b>	<b>294.90</b>	<b>332.70</b>	<b>313.80</b>	<b>272.10</b>	<b>306.40</b>	<b>311.90</b>	<b>289.10</b>	<b>306.20</b>	<b>298.10</b>	<b>307.60</b>	<b>272.10</b>
Hora	07:00:00	03:00:00	07:00:00	06:00:00	04:00:00	06:00:00	03:00:00	02:00:00	10:00:00	02:00:00	02:00:00	07:00:00	06:00:00
Fecha	01-ene-13	18-feb-13	03-mar-13	07-abr-13	30-may-13	30-jun-13	22-jul-13	05-ago-13	15-sep-13	21-oct-13	11-nov-13	25-dic-13	30-jun-13
<b>Factor de Carga del SIN (%)</b>	<b>71.80</b>	<b>69.14</b>	<b>71.61</b>	<b>74.61</b>	<b>72.79</b>	<b>72.18</b>	<b>72.10</b>	<b>72.02</b>	<b>71.23</b>	<b>71.67</b>	<b>70.22</b>	<b>69.67</b>	<b>69.14</b>
Nivel Inicial de Apanás - Metros Sobre Nivel del Mar	954.55	954.75	954.27	953.54	953.01	952.52	952.96	953.46	953.58	954.63	955.83	955.98	954.55
Nivel Final de Apanás - Metros Sobre Nivel del Mar	954.75	954.27	953.54	953.01	952.52	952.96	953.46	953.58	954.63	955.83	955.98	955.92	955.92
<b>Aporte Total de Apanás - Millones de Metros Cúbicos</b>	<b>18.96</b>	<b>6.93</b>	<b>4.64</b>	<b>-2.31</b>	<b>9.44</b>	<b>42.07</b>	<b>57.90</b>	<b>49.36</b>	<b>91.92</b>	<b>96.61</b>	<b>53.54</b>	<b>42.62</b>	<b>471.68</b>

Fuente: Empresas Públicas y Privadas del Sistema Interconectado Nacional (S.I.N.) y Sistema Aislado Nacional (S.A.N.), Centro Nacional de Despacho de Carga (CNDC).

Los Ingresos (C\$) corresponden al total de importes facturados a los clientes, sin incluir los impuestos (IVA y Municipales) ni Regulación.

Para el cálculo del precio promedio se utilizan solamente los importes más restituciones por concepto de: Energía, Potencia, Recargo por Bajo Factor de Potencia, Comercialización y Alumbrado Público.

Dirección de Estudios Económicos y Tarifas, DGE - INE.