



ETESA

Empresa de Transmisión Eléctrica, S.A.

Informe de Contrataciones 2011-2031

16 de Marzo de 2011

Contenido

| | | |
|----------|--|-----------|
| 1 | Información de los Contratos 2011-2024 | 1 |
| 1.1 | <i>Contratos Vigentes de EDEMET</i> | 1 |
| 1.2 | <i>Contratos Vigentes de EDECHI</i> | 4 |
| 1.3 | <i>Contratos Vigentes de ENSA</i> | 6 |
| 2 | Pronósticos de Demanda 2011-2031 | 9 |
| 2.1 | <i>Pronóstico de Demanda de EDEMET</i> | 9 |
| 2.2 | <i>Pronóstico de Demanda de EDECHI</i> | 10 |
| 2.3 | <i>Pronóstico de Demanda de ENSA</i> | 11 |
| 3 | Niveles de Contratación de Potencia y Energía | 12 |
| 3.1 | <i>Niveles de contratación de Potencia</i> | 12 |
| 3.1.1 | Nivel de contratación actual de EDEMET | 13 |
| 3.1.2 | Nivel de Contratación Actual de EDECHI | 15 |
| 3.1.3 | Nivel de Contratación Actual de ENSA | 17 |
| 3.2 | <i>Nivel de Contratación de Energía</i> | 18 |
| 3.2.1 | Nivel de contratación actual de EDEMET | 19 |
| 3.2.2 | Nivel de Contratación Actual de EDECHI | 21 |
| 3.2.3 | Nivel de Contratación Actual de ENSA | 23 |
| 4 | Requerimientos de Potencia y Energía | 24 |
| 4.1 | <i>Requerimientos de Potencia de EDEMET</i> | 25 |
| 4.2 | <i>Requerimientos de Potencia de EDECHI</i> | 26 |
| 4.3 | <i>Requerimientos de Potencia de ENSA</i> | 27 |
| 4.4 | <i>Requerimientos de Energía de EDEMET</i> | 28 |
| 4.5 | <i>Requerimientos de Energía de EDECHI</i> | 29 |
| 4.6 | <i>Requerimientos de Energía de ENSA</i> | 30 |
| 5 | Necesidades de Contratación de Potencia y Energía | 30 |
| 5.1 | <i>Necesidades de Contratación 2011-2031</i> | 31 |
| 5.1.1 | Necesidades de Contratación de Potencia Firme | 31 |
| 5.1.2 | Necesidades de Contratación de Energía. | 34 |
| 6 | Nuevos Actos de Contrataciones Programadas | 36 |
| 6.1 | <i>Contrataciones de Corto Plazo (2011-2015)</i> | 36 |
| 6.2 | <i>Contrataciones de Largo Plazo (2016-2031)</i> | 38 |
| 7 | Nuevo Nivel de Contrataciones | 40 |
| 7.1 | <i>Potencia Total Contratada</i> | 40 |
| 7.2 | <i>Energía Total Contratada</i> | 43 |
| 7.3 | <i>Niveles de Contratación de Potencia</i> | 46 |
| 7.4 | <i>Niveles de Contratación de Energía</i> | 49 |

1 Información de los Contratos 2011-2024

Según información entregada por las Empresas Distribuidoras estos son los contratos vigentes

1.1 Contratos Vigentes de EDEMET

Contratos de Potencia con Energía Asociada

| No. Contrato | EMPRESA | FECHA DE SUMINISTRO | | DMG Utilizada para Energía | Precio Potencia (\$/KW-mes) | Precio Energía (\$/KWh) | | Cto Comb. \$/bbl |
|--------------|---------------------|---------------------|-----------|----------------------------|-----------------------------|-------------------------|---------|------------------|
| | | INICIO | FINAL | | | Fijo | Index. | |
| 02-99 | AES | 20-Nov-03 | 22-Nov-13 | DMG Anual | 7.95 | 0.04000 | - | - |
| 12-05 | AES | 01-Ene-09 | 31-Dic-18 | DMG Anual | 18.00 | 0.03410 | - | - |
| 14-05* | Fortuna | 01-Ene-09 | 31-Dic-18 | DMG Anual | 7.53 | 0.04700 | - | - |
| 15-06 | AES | 01-Ene-11 | 31-Dic-20 | DMG Anual sin RC | 1.00 | 0.07870 | - | - |
| 16-06*** | Hidromáquinas | 01-Jun-09 | 31-Dic-18 | DMG Anual sin RC | 9.50 | 0.05600 | - | - |
| 08-07* | Gen. del Atlántico | 01-Jun-09 | 30-Jun-14 | DMG Mensual sin RC | 12.00 | 0.01944 | 0.05706 | 40.24 |
| 09-07* | Inv. y Des. Balboa | 01-Ago-08 | 30-Jun-14 | DMG Mensual sin RC | 31.00 | 0.01350 | 0.05706 | 40.24 |
| 11-07 | ESEPSA | 01-Jul-09 | 30-Jun-14 | DMG Mensual sin RC | 12.00 | 0.06290 | - | - |
| 04-08 | AES | 01-Ene-12 | 31-Dic-21 | DMG Mensual sin RC | 10.00 | 0.07290 | - | - |
| 05-08 | Hydro Caisán | 01-Ene-13 | 31-Dic-22 | DMG Mensual sin RC | 31.62 | 0.03060 | - | - |
| 06-08 | Enel Fortuna | 01-Ene-13 | 31-Dic-22 | DMG Mensual sin RC | 12.00 | 0.07500 | - | - |
| 07-08 | Electron Investment | 01-Ene-13 | 31-Dic-22 | DMG Mensual sin RC | 15.00 | 0.06950 | - | - |
| 08-08 | AES | 01-Ene-13 | 31-Dic-22 | DMG Mensual sin RC | 10.00 | 0.07980 | - | - |
| 09-08 | Altermegy | 01-Ene-13 | 31-Dic-22 | DMG Mensual sin RC | 28.00 | 0.07110 | - | - |
| 10-08 | Bontex | 01-Ene-13 | 31-Dic-22 | DMG Mensual sin RC | 28.00 | 0.07110 | - | - |
| 07-07** | Térmica del Caribe | 01-Mar-09 | 30-Jun-14 | DMG Mensual sin RC | 22.50 | 0.02964 | 0.05706 | 40.24 |
| 04-09 | Térmica del Caribe | 01-Ene-10 | 31-Dic-11 | DMG Mensual sin RC | 7.15 | 0.04128 | 0.06192 | 42.82 |
| 05-09 | Ideal Panamá | 01-Ene-10 | 31-Dic-11 | DMG Mensual sin RC | 10.13 | 0.09380 | - | - |
| 06-09 | Pedregal Power | 01-Ene-10 | 31-Dic-11 | DMG Mensual sin RC | 7.23 | 0.04284 | 0.06426 | 42.86 |

Datos Generales

* Enmienda firmada al Contrato.

** Contrato Traspasado de EDECHI a EDEMET

*** Contrato Eliminado

Donde:

PFC: Potencia Firme Contratada.

DMG: Demanda Máxima de Generación.

E: Energía Registrada o Medida en los Puntos de Entrega.

| CONTRATO | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 |
|----------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-------------|-------------|-------------|
| 02-99 (AES) | 62.70 | 62.70 | 62.70 | | | | | | | | | | | | |
| 12-05 (AES) | 113.00 | 113.00 | 113.00 | 196.00 | 196.00 | 196.00 | 196.00 | 196.00 | | | | | | | |
| 14-05 (Fortuna) | 90.83 | 87.92 | | | | | | | | | | | | | |
| 15-06 (AES) | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | | | | | |
| 08-07 (GENA) | 45.00 | 45.00 | 45.00 | 45.00 | | | | | | | | | | | |
| 09-07 (I.D.B) | 37.30 | 62.25 | 62.25 | 62.25 | | | | | | | | | | | |
| 11-07 (ESEPSA) | 1.44 | 1.44 | 1.44 | 1.44 | | | | | | | | | | | |
| 04-08 (AES) | | 61.00 | 77.00 | 77.00 | 77.00 | 77.00 | 77.00 | 77.00 | 77.00 | 77.00 | 77.00 | | | | |
| 05-08 (Hydro Caisán) | | | 17.04 | 17.04 | 17.04 | 17.04 | 17.04 | 17.04 | 17.04 | 17.04 | 17.04 | 17.04 | | | |
| 06-08 (Fortuna) | | | 26.95 | 26.95 | 26.95 | 26.95 | 26.95 | 26.95 | 26.95 | 26.95 | 26.95 | 26.95 | | | |
| 07-08 (Electron) | | | 34.65 | 34.65 | 34.65 | 34.65 | 34.65 | 34.65 | 34.65 | 34.65 | 34.65 | 34.65 | | | |
| 08-08 (AES) | | | 31.57 | 31.57 | 31.57 | 31.57 | 31.57 | 31.57 | 31.57 | 31.57 | 31.57 | 31.57 | | | |
| 09-08 (Alternegy) | | | 61.60 | 61.60 | 61.60 | 61.60 | 61.60 | 61.60 | 61.60 | 61.60 | 61.60 | 61.60 | | | |
| 10-08 (Bontex) | | | 15.40 | 15.40 | 15.40 | 15.40 | 15.40 | 15.40 | 15.40 | 15.40 | 15.40 | 15.40 | | | |
| 07-07 (Térmica del Caribe) | 4.275 | 4.275 | 4.275 | 4.275 | | | | | | | | | | | |
| 04-09 (Térmica del Caribe) | 15.00 | | | | | | | | | | | | | | |
| 05-09 (Ideal Panamá) | 20.07 | | | | | | | | | | | | | | |
| 06-09 (Pedregal Power) | 32.00 | | | | | | | | | | | | | | |
| TOTAL | 436.62 | 452.59 | 567.88 | 588.18 | 475.21 | 475.21 | 475.21 | 475.21 | 279.21 | 279.21 | 264.21 | 187.21 | 0.00 | 0.00 | 0.00 |

Contratos de Sólo Potencia

| No. Contrato | EMPRESA | FECHA DE SUMINISTRO | | Opción de Indexación de Precios | Precio Potencia (\$/kW-mes) |
|--------------|--------------------------|---------------------|-----------|---------------------------------|-----------------------------|
| | | INICIO | FINAL | | |
| *DME-03-08 | Fortuna | 01-Ene-10 | 31-Dic-11 | Precio Fijo | 8.50 |
| 17-10 | ESEPSA | 01-Ene-11 | 31-Dic-14 | Precio Fijo | 10.50 |
| 19-10 | Fortuna | 01-Ene-11 | 31-Dic-14 | Precio Fijo | 9.27 |
| 21-10 | Generadora del Atlántico | 01-Ene-11 | 31-Dic-14 | Precio Fijo | 10.37 |
| 23-10 | ACP | 01-Ene-11 | 31-Dic-14 | Precio Fijo | 7.50 |

| Contrato de solo Potencia (MW) | | | | | | | | | | | | | |
|--------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| CESION PARCIAL (2011) | ENE | FEB | MAR | ABR | MAY | JUN | JUL | AGO | SEP | OCT | NOV | DIC | |
| *DME 03-08 (Fortuna) | 13 | 37 | 10 | 11 | 0 | 13 | 55 | 2 | 15 | 4 | 0 | 0 | |

* Cesión Parcial a EDEMET del Contrato DME-003-08 para la Compra de Potencia Firme suscrito entre las empresas ENSA y Enel Fortuna, S.A.

| Empresas/años | 2011 | 2012 | 2013 | 2014 |
|----------------------|-------|-------|-------|-------|
| ESEPSA (17-10) | 10.00 | 13.41 | 13.75 | 3.73 |
| ENEL FORTUNA (19-10) | 2.40 | 10.80 | 11.08 | 3.00 |
| GENA (21-10) | 1.00 | 4.50 | 4.62 | 1.25 |
| ACP (23-10) | 18.00 | 32.40 | 33.23 | 9.00 |
| Total | 31.40 | 61.11 | 62.68 | 16.98 |

Contratos de Sólo Energía

| No. Contrato | EMPRESA | FECHA DE SUMINISTRO | | Potencia Equivalente Contratada (MW) | Precio Energía (\$/kWh) | |
|--------------|--------------------------|---------------------|-----------|--------------------------------------|-------------------------|---------|
| | | INICIO | FINAL | | Fijo | Index |
| 02-09 | Generadora del Atlántico | 01-May-09 | 31-Dic-11 | 27 | 0.04696 | 0.07044 |
| 03-09 | PanAm Generating | 01-May-09 | 31-Dic-11 | 16 | 0.04656 | 0.06984 |

$$EAR = (PE / (DMG-R)) \times E$$

Donde:

AER: Energía Asociada Requerida

PE: Potencia Equivalente

DMG: Demanda Máxima de Generación, Mensual Sin Reserva

E: Energía Total Medida

R: Capacidad de Reserva requerida para la confiabilidad de largo plazo

Total de Potencia y Energía de los Contratos Vigentes

A continuación presentamos el total de potencia y energía contratada mensualmente para los años 2011-2024.

Cuadro No. 1 Potencia Firme Contratada Mensual (MW)

| AÑOS | ENE | FEB | MAR | ABR | MAY | JUN | JUL | AGO | SEP | OCT | NOV | DIC | TOTAL |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 2011 | 481.07 | 505.07 | 478.07 | 479.07 | 468.07 | 481.07 | 523.07 | 470.07 | 483.07 | 472.07 | 468.07 | 468.07 | 523.07 |
| 2012 | 513.70 | 513.70 | 513.70 | 513.70 | 513.70 | 513.70 | 513.70 | 513.70 | 513.70 | 513.70 | 513.70 | 513.70 | 513.70 |
| 2013 | 630.55 | 630.55 | 630.55 | 630.55 | 630.55 | 630.55 | 630.55 | 630.55 | 630.55 | 630.55 | 567.85 | 567.85 | 630.55 |
| 2014 | 605.15 | 605.15 | 605.15 | 605.15 | 605.15 | 605.15 | 492.19 | 492.19 | 492.19 | 492.19 | 492.19 | 492.19 | 605.15 |
| 2015 | 475.21 | 475.21 | 475.21 | 475.21 | 475.21 | 475.21 | 475.21 | 475.21 | 475.21 | 475.21 | 475.21 | 475.21 | 475.21 |
| 2016 | 475.21 | 475.21 | 475.21 | 475.21 | 475.21 | 475.21 | 475.21 | 475.21 | 475.21 | 475.21 | 475.21 | 475.21 | 475.21 |
| 2017 | 475.21 | 475.21 | 475.21 | 475.21 | 475.21 | 475.21 | 475.21 | 475.21 | 475.21 | 475.21 | 475.21 | 475.21 | 475.21 |
| 2018 | 475.21 | 475.21 | 475.21 | 475.21 | 475.21 | 475.21 | 475.21 | 475.21 | 475.21 | 475.21 | 475.21 | 475.21 | 475.21 |
| 2019 | 279.21 | 279.21 | 279.21 | 279.21 | 279.21 | 279.21 | 279.21 | 279.21 | 279.21 | 279.21 | 279.21 | 279.21 | 279.21 |
| 2020 | 279.21 | 279.21 | 279.21 | 279.21 | 279.21 | 279.21 | 279.21 | 279.21 | 279.21 | 279.21 | 279.21 | 279.21 | 279.21 |
| 2021 | 264.21 | 264.21 | 264.21 | 264.21 | 264.21 | 264.21 | 264.21 | 264.21 | 264.21 | 264.21 | 264.21 | 264.21 | 264.21 |
| 2022 | 187.21 | 187.21 | 187.21 | 187.21 | 187.21 | 187.21 | 187.21 | 187.21 | 187.21 | 187.21 | 187.21 | 187.21 | 187.21 |
| 2023 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2024 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Cuadro No. 2 Energía Asociada Contratada Mensual (GWh)

| AÑOS | ENE | FEB | MAR | ABR | MAY | JUN | JUL | AGO | SEP | OCT | NOV | DIC | TOTAL |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|----------|
| 2011 | 218.97 | 199.55 | 230.70 | 220.13 | 228.36 | 217.49 | 220.50 | 214.09 | 212.91 | 218.13 | 201.69 | 220.94 | 2,603.47 |
| 2012 | 202.97 | 190.72 | 214.65 | 202.77 | 210.40 | 200.19 | 202.62 | 196.54 | 195.33 | 200.36 | 184.90 | 202.81 | 2,404.24 |
| 2013 | 266.86 | 240.86 | 277.31 | 260.44 | 270.90 | 261.01 | 265.43 | 257.45 | 254.01 | 261.46 | 220.48 | 238.06 | 3,074.26 |
| 2014 | 275.28 | 248.44 | 286.60 | 269.41 | 280.47 | 269.98 | 219.37 | 211.91 | 209.82 | 215.68 | 200.67 | 218.30 | 2,905.94 |
| 2015 | 218.98 | 197.58 | 229.67 | 214.26 | 223.28 | 213.74 | 217.18 | 209.52 | 207.63 | 213.43 | 198.46 | 216.05 | 2,559.78 |
| 2016 | 218.81 | 203.03 | 229.79 | 214.28 | 223.29 | 213.72 | 217.31 | 209.25 | 207.63 | 213.34 | 198.32 | 215.87 | 2,564.63 |
| 2017 | 218.77 | 195.76 | 230.00 | 214.37 | 223.36 | 213.61 | 217.32 | 209.07 | 207.51 | 213.32 | 198.47 | 215.92 | 2,557.47 |
| 2018 | 218.63 | 195.83 | 230.02 | 214.40 | 223.34 | 213.46 | 217.30 | 209.04 | 207.44 | 213.04 | 198.31 | 215.90 | 2,556.70 |
| 2019 | 138.88 | 124.85 | 141.52 | 129.34 | 134.75 | 131.52 | 134.41 | 131.02 | 128.06 | 131.99 | 125.05 | 133.89 | 1,585.29 |
| 2020 | 139.66 | 130.04 | 142.31 | 130.18 | 135.63 | 132.38 | 135.28 | 131.88 | 128.90 | 132.84 | 125.86 | 134.76 | 1,599.73 |
| 2021 | 132.16 | 118.81 | 134.67 | 123.20 | 128.35 | 125.27 | 128.02 | 124.79 | 121.98 | 125.71 | 119.10 | 127.52 | 1,509.58 |
| 2022 | 93.65 | 84.19 | 95.42 | 87.29 | 90.94 | 88.76 | 90.71 | 88.43 | 86.43 | 89.08 | 84.39 | 90.36 | 1,069.67 |
| 2023 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

1.2 Contratos Vigentes de EDECHI

Contratos de Potencia con Energía Asociada

| No. Contrato | EMPRESA | FECHA DE SUMINISTRO | | DMG Utilizada para Energía Asociada | Precio Potencia (\$/KW-mes) | Precio Energía (\$/KWh) | | Cto Comb. \$/bbl |
|--------------|--------------------|---------------------|-----------|-------------------------------------|-----------------------------|-------------------------|---------|------------------|
| | | INICIO | FINAL | | | Fijo | Index. | |
| 13-05 | AES | 01-Ene-09 | 31-Dic-18 | DMG Anual | 18.00 | 0.03410 | - | - |
| 15-05* | Fortuna | 01-Ene-09 | 31-Dic-18 | DMG Anual | 7.53 | 0.04700 | - | - |
| 17-06*** | Los Estrechos | 01-Ene-11 | 31-Dic-20 | DMG Anual | 8.00 | 0.06000 | - | - |
| 18-06 | Salto de Francolí | 01-Sep-09 | 31-Jul-19 | DMG Anual | 16.00 | 0.04500 | - | - |
| 19-06 | AES | 01-Ene-11 | 31-Dic-20 | DMG Anual | 1.00 | 0.07870 | - | - |
| 05-07* | Gen. del Atlántico | 01-Jun-09 | 31-Dic-10 | DMG Mensual sin RC | 12.00 | 0.01944 | 0.05706 | 40.24 |
| 06-07** | Inv. y Des. Balboa | 01-Ago-08 | 30-Jun-14 | DMG Mensual sin RC | 31.00 | 0.01350 | 0.05706 | 40.24 |
| 07-07** | Térmica del Caribe | 01-Mar-09 | 30-Jun-14 | DMG Mensual sin RC | 22.50 | 0.02964 | 0.05706 | 40.24 |

Datos Generales

* Enmienda firmada al Contrato.

** Contrato Traspasado de EDECHI a EDEMET

*** Contrato Traspasado de EDECHI a ENSA

**** Contrato Eliminado

Donde:

PFC: Potencia Firme Contratada.

DMG: Demanda Máxima de Generación.

E: Energía Registrada o Medida en los Puntos de Entrega.

| CONTRATO | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 |
|--------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|-------------|-------------|-------------|----------|
| 13-05 (AES) | 17.00 | 17.00 | 17.00 | 29.00 | 29.00 | 29.00 | 29.00 | 29.00 | | | | | | | |
| 15-05 (Fortuna) | 29.17 | 32.07 | | | | | | | | | | | | | |
| 18-06 (S.Francolí) | 0.71 | 0.71 | 0.71 | 0.71 | 0.71 | 0.71 | 0.71 | 0.71 | 0.40 | | | | | | |
| 19-06 (AES) | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | | | | | |
| TOTAL | 81.88 | 84.78 | 52.71 | 64.71 | 64.71 | 64.71 | 64.71 | 64.71 | 35.40 | 35.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0 |

Contratos de Sólo Potencia

| No. Contrato | EMPRESA | FECHA DE SUMINISTRO | | Opción de Indexación de Precios | Precio Potencia (\$/kW-mes) |
|--------------|--------------------------|---------------------|-----------|---------------------------------|-----------------------------|
| | | INICIO | FINAL | | |
| 17-10 | ESEPSA | 01-Ene-11 | 31-Dic-14 | Precio Fijo | 10.50 |
| 19-10 | Fortuna | 01-Ene-11 | 31-Dic-14 | Precio Fijo | 9.27 |
| 21-10 | Generadora del Atlántico | 01-Ene-11 | 31-Dic-14 | Precio Fijo | 10.37 |
| 23-10 | ACP | 01-Ene-11 | 31-Dic-14 | Precio Fijo | 7.50 |

| Empresas/años | 2011 | 2012 | 2013 | 2014 |
|---------------|------|------|------|------|
| ESEPSA | 0.00 | 0.00 | 0.00 | 1.86 |
| ENEL FORTUNA | 0.00 | 0.00 | 0.00 | 1.50 |
| GENA | 0.00 | 0.00 | 0.00 | 0.63 |
| ACP | 0.00 | 0.00 | 0.00 | 4.50 |
| Total | 0 | 0 | 0 | 8.49 |

Contratos de Sólo Energía

Actualmente EDECHI no cuenta con contratos de Sólo Energía.

Total de Potencia y Energía de los Contratos Vigentes

A continuación presentamos el total de potencia y energía contratada mensualmente para los años 2011-2024.

Cuadro No 3 Potencia Firme Contratada Mensual (MW)

| AÑOS | ENE | FEB | MAR | ABR | MAY | JUN | JUL | AGO | SEP | OCT | NOV | DIC | TOTAL |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 2011 | 81.88 | 81.88 | 81.88 | 81.88 | 81.88 | 81.88 | 81.88 | 81.88 | 81.88 | 81.88 | 81.88 | 81.88 | 81.88 |
| 2012 | 84.78 | 84.78 | 84.78 | 84.78 | 84.78 | 84.78 | 67.71 | 67.71 | 67.71 | 67.71 | 67.71 | 67.71 | 84.78 |
| 2013 | 52.71 | 52.71 | 52.71 | 52.71 | 52.71 | 52.71 | 52.71 | 52.71 | 52.71 | 52.71 | 52.71 | 52.71 | 52.71 |
| 2014 | 73.20 | 73.20 | 73.20 | 73.20 | 73.20 | 73.20 | 73.20 | 73.20 | 73.20 | 73.20 | 73.20 | 73.20 | 73.20 |
| 2015 | 64.71 | 64.71 | 64.71 | 64.71 | 64.71 | 64.71 | 64.71 | 64.71 | 64.71 | 64.71 | 64.71 | 64.71 | 64.71 |
| 2016 | 64.71 | 64.71 | 64.71 | 64.71 | 64.71 | 64.71 | 64.71 | 64.71 | 64.71 | 64.71 | 64.71 | 64.71 | 64.71 |
| 2017 | 64.71 | 64.71 | 64.71 | 64.71 | 64.71 | 64.71 | 64.71 | 64.71 | 64.71 | 64.71 | 64.71 | 64.71 | 64.71 |
| 2018 | 64.71 | 64.71 | 64.71 | 64.71 | 64.71 | 64.71 | 64.71 | 64.71 | 64.71 | 64.71 | 64.71 | 64.71 | 64.71 |
| 2019 | 35.40 | 35.40 | 35.40 | 35.40 | 35.40 | 35.40 | 35.40 | 35.40 | 35.40 | 35.40 | 35.40 | 35.40 | 35.40 |
| 2020 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 |
| 2021 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2022 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2023 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2024 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Cuadro No. 4 Energía Asociada Contratada Mensual (GWh)

| AÑOS | ENE | FEB | MAR | ABR | MAY | JUN | JUL | AGO | SEP | OCT | NOV | DIC | TOTAL |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 2011 | 40.22 | 37.35 | 42.53 | 40.54 | 40.96 | 40.23 | 39.14 | 37.94 | 38.26 | 40.63 | 37.00 | 40.06 | 474.87 |
| 2012 | 41.02 | 38.80 | 43.27 | 40.91 | 41.39 | 40.63 | 32.29 | 31.33 | 31.60 | 33.83 | 30.84 | 33.21 | 439.12 |
| 2013 | 27.16 | 24.83 | 28.13 | 26.47 | 26.91 | 26.98 | 25.86 | 25.21 | 25.50 | 27.66 | 24.95 | 26.70 | 316.37 |
| 2014 | 32.78 | 29.99 | 34.13 | 32.24 | 32.51 | 32.43 | 31.24 | 30.27 | 30.54 | 32.81 | 29.90 | 32.14 | 380.99 |
| 2015 | 32.89 | 29.85 | 34.13 | 31.93 | 32.18 | 32.14 | 30.95 | 29.94 | 30.18 | 32.45 | 29.55 | 31.82 | 378.00 |
| 2016 | 32.83 | 30.44 | 34.07 | 31.94 | 32.16 | 32.14 | 30.96 | 29.90 | 30.14 | 32.39 | 29.51 | 31.78 | 378.26 |
| 2017 | 32.84 | 29.35 | 34.09 | 31.94 | 32.13 | 32.14 | 30.96 | 29.85 | 30.12 | 32.34 | 29.48 | 31.76 | 376.99 |
| 2018 | 32.87 | 29.38 | 34.14 | 31.94 | 32.18 | 32.16 | 30.98 | 29.85 | 30.12 | 32.34 | 29.48 | 31.77 | 377.22 |
| 2019 | 19.48 | 17.93 | 19.82 | 18.14 | 18.82 | 19.20 | 18.12 | 17.87 | 18.11 | 20.17 | 17.78 | 18.82 | 224.26 |
| 2020 | 19.24 | 18.36 | 19.55 | 17.89 | 18.59 | 18.98 | 17.90 | 17.67 | 17.91 | 19.99 | 17.59 | 18.60 | 222.28 |
| 2021 | 0.35 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.35 |
| 2022 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2023 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2024 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

1.3 Contratos Vigentes de ENSA

Contratos de Potencia con Energía Asociada

| No. Contrato | EMPRESA | FECHA DE SUMINISTRO | | DMG Utilizada para Energía PFC / DMG x E | Precio Potencia (\$/KW-mes) | Precio Energía | | Cto Comb. \$/bbl |
|--------------|---------------------|---------------------|-----------|---|--------------------------------|----------------|---------|---------------------|
| | | INICIO | FINAL | | | Fijo | Index. | |
| 03-99 | AES | 03-Nov-03 | 02-Nov-13 | DMG Anual | 7.95 | 0.04000 | - | - |
| 07-08 | AES | 01-Ene-12 | 31-Dic-21 | DMG Mensual sin RC | 10.00 | 0.07290 | - | - |
| 09-08 | AES | 01-Ene-13 | 31-Dic-22 | DMG Mensual sin RC | 10.00 | 0.07980 | - | - |
| 01-06 | Fortuna | 01-Ene-09 | 31-Dic-18 | DMG Mensual sin RC | 7.53 | 0.05490 | - | - |
| 08-08 | Fortuna | 01-Ene-13 | 31-Dic-22 | DMG Mensual sin RC | 12.00 | 0.07500 | - | - |
| 17-06 | Bahia las Minas | 01-Ene-10 | 31-Dic-18 | DMG Mensual sin RC | 28.14 | 0.01092 | 0.02018 | 47.00 |
| 18-06 | Bahia las Minas | 01-Ene-19 | 31-Dic-23 | DMG Mensual sin RC | 28.77 | 0.01092 | 0.02018 | 47.00 |
| 10-07 | Aseguradora Mundial | 01-Ene-11 | 31-Dic-18 | DMG Mensual sin RC | 12.00 | 0.01220 | 0.05780 | 43.00 |
| 06-07 | Inv. y Des. Balboa | 01-Ene-09 | 31-Dic-11 | DMG Mensual sin RC | 31.00 | 0.01350 | 0.05706 | 40.24 |
| 10-06 | PAN AM | 01-Ene-10 | 31-Dic-19 | DMG Mensual sin RC | 12.00 | 0.01430 | 0.05780 | 43.00 |
| 11-06 | PAN AM | 01-Ene-11 | 31-Dic-20 | DMG Mensual sin RC | 12.00 | 0.01430 | 0.05780 | 43.00 |
| 02-05 | Paso Ancho | 10-May-10 | 31-Dic-18 | DMG Mensual | 6.65 | 0.04056 | - | - |
| 05-07 | Termica del Caribe | 01-Mar-09 | 30-Jun-14 | DMG Mensual sin RC | 22.50 | 0.02960 | 0.05706 | 40.24 |
| 07-07 | ESEPSA | 01-Jul-09 | 30-Jun-14 | DMG Mensual sin RC | 12.00 | 0.06290 | - | - |
| 09-07 | Gen. del Atlántico | 06-Ene-09 | 30-Jun-14 | DMG Mensual sin RC | 12.00 | 0.01944 | 0.05706 | 40.24 |
| 10-08 | Hydro Caisan | 01-Ene-13 | 31-Dic-22 | DMG Mensual sin RC | 31.62 | | 0.03060 | - |
| 03-09 | ACP | 01-Ene-11 | 31-Dic-11 | DMG Mensual sin RC | 10.13 | 0.02060 | 0.08250 | 40.24 |
| 11-08 | Electron Investment | 01-Ene-13 | 31-Dic-22 | DMG Mensual sin RC | 15.00 | 0.06965 | - | - |
| 12-08 | alternergy | 01-Ene-13 | 31-Dic-22 | DMG Mensual sin RC | 28.00 | | 0.07110 | - |
| 13-08 | BONTEX | 01-Ene-13 | 31-Dic-22 | DMG Mensual sin RC | 28.00 | | 0.07110 | - |

Datos Generales

Donde:

PFC: Potencia Firme Contratada.

DMG: Demanda Máxima de Generación.

E: Energía Registrada o Medida en los Puntos de Entrega.

| CONTRATO | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 |
|----------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-------------|-------------|
| 03-99 (AES) | 48.72 | 48.72 | 48.72 | | | | | | | | | | | | |
| 07-08 (AES) | | 39.00 | 23.00 | 23.00 | 23.00 | 23.00 | 23.00 | 23.00 | 23.00 | 23.00 | 23.00 | | | | |
| 09-08 (AES) | | | 9.43 | 9.43 | 9.43 | 9.43 | 9.43 | 9.43 | 9.43 | 9.43 | 9.43 | 9.43 | | | |
| 01-06 (fortuna) | 80.00 | 80.00 | 120.00 | 120.00 | 120.00 | 120.00 | 120.00 | 120.00 | | | | | | | |
| 08-08 (fortuna) | | | 8.05 | 8.05 | 8.05 | 8.05 | 8.05 | 8.05 | 8.05 | 8.05 | 8.05 | 8.05 | | | |
| 17-06 (BLM) | 108.00 | 108.00 | 108.00 | 108.00 | 108.00 | 108.00 | 108.00 | 108.00 | | | | | | | |
| 18-06 (BLM) | | | | | | | | | 108.00 | 108.00 | 108.00 | 108.00 | 108.00 | | |
| 10-07 (ASEG. MUNDIAL) | 22.50 | 22.50 | 22.50 | 22.50 | 22.50 | 22.50 | 22.50 | 22.50 | | | | | | | |
| 06-07 (IDB) | 24.90 | | | | | | | | | | | | | | |
| 10-06 (PAN AM) | 20.00 | 20.00 | 20.00 | 20.00 | 20.00 | 20.00 | 20.00 | 20.00 | 20.00 | | | | | | |
| 11-06 (PAN AM) | 60.00 | 60.00 | 60.00 | 60.00 | 60.00 | 60.00 | 60.00 | 60.00 | 60.00 | 60.00 | | | | | |
| 02-05 (Paso Ancho) | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | | | | | | | |
| 05-07 (Termica del Caribe) | 2.85 | 2.85 | 2.85 | 2.85 | | | | | | | | | | | |
| 07-07 (ESEPSA) | 0.96 | 0.96 | 0.96 | 0.96 | | | | | | | | | | | |
| 09-07 (GENA) | 30.00 | 30.00 | 30.00 | 30.00 | | | | | | | | | | | |
| 10-08 (HYDRO CAISAN) | | | 5.09 | 5.09 | 5.09 | 5.09 | 5.09 | 5.09 | 5.09 | 5.09 | 5.09 | 5.09 | | | |
| 03-09 (ACP) | 27.00 | | | | | | | | | | | | | | |
| 11-08 (ELECTRO INVEST) | | | 10.35 | 10.35 | 10.35 | 10.35 | 10.35 | 10.35 | 10.35 | 10.35 | 10.35 | 10.35 | | | |
| 12-08 (ALTERNERGY) | | | 18.40 | 18.40 | 18.40 | 18.40 | 18.40 | 18.40 | 18.40 | 18.40 | 18.40 | 18.40 | | | |
| 13-08 (BONTEX) | | | 4.60 | 4.60 | 4.60 | 4.60 | 4.60 | 4.60 | 4.60 | 4.60 | 4.60 | 4.60 | | | |
| TOTAL | 428.93 | 416.03 | 495.95 | 447.23 | 413.42 | 413.42 | 413.42 | 413.42 | 266.92 | 246.92 | 186.92 | 163.92 | 108.00 | 0.00 | 0.00 |

Contratos de Sólo Potencia

| No. Contrato | EMPRESA | FECHA DE SUMINISTRO | | Opción de Indexación de Precios | Precio Potencia (\$/kW-mes) |
|--------------|--------------------------|---------------------|-----------|---------------------------------|-----------------------------|
| | | INICIO | FINAL | | |
| *DME-03-08 | Fortuna | 01-Ene-10 | 31-Dic-11 | Precio Fijo | 8.5 |
| DME-05-08 | Pedregal | 01-Ene-10 | 31-Dic-11 | Precio Fijo | 9.45 |
| DME-06-08 | ACP | 01-Ene-10 | 31-Dic-11 | Precio Fijo | 10.49 |
| DME-008-10 | ESEPSA | 01-Ene-11 | 31-Dic-14 | Precio Fijo | 10.50 |
| DME-009-10 | Fortuna | 01-Ene-11 | 31-Dic-14 | Precio Fijo | 9.27 |
| DME-010-10 | Generadora del Atlántico | 01-Ene-11 | 31-Dic-14 | Precio Fijo | 10.37 |
| DME-011-10 | ACP | 01-Ene-11 | 31-Dic-14 | Precio Fijo | 7.50 |

| Contratos de Sólo Potencia (MW) | | | | | | | | | | | | |
|---------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| año 2011 | Ene | Feb | Mar | Abr | May | Jun | Jul | Ago | Sep | Oct | Nov | Dic |
| *DME-03-08 (fortuna) | 27 | 19 | 41 | 45 | 56 | 43 | 1 | 54 | 41 | 52 | 56 | 56 |
| DME-05-08 (Pedregal) | 1 | 15 | 1 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 |
| DME-06-08 (ACP) | 0 | 0 | 0 | 15 | 0 | 0 | 40 | 5 | 15 | 5 | 0 | 10 |

* Cesión Parcial a EDEMET del Contrato DME-003-08 para la Compra de Potencia Firme suscrito entre las empresas ENSA y Enel Fortuna, S.A.

| Empresas/años | 2011 | 2012 | 2013 | 2014 |
|---------------|-------------|-------------|-------------|--------------|
| ESEPSA | 0.00 | 1.49 | 1.15 | 9.31 |
| ENEL FORTUNA | 0.00 | 1.20 | 0.92 | 7.50 |
| GENA | 0.00 | 0.50 | 0.38 | 3.12 |
| ACP | 0.00 | 3.60 | 2.77 | 22.50 |
| Total | 0.00 | 6.79 | 5.22 | 42.43 |

Contratos de Solo Energía

| No. Contrato | EMPRESA | FECHA DE | | Opción de Indexación de Precios | Potencia Equivalente Contratada (MW) | Precio Ofertado (\$/kWh) |
|--------------|---------|-----------|-----------|---------------------------------|--------------------------------------|--------------------------|
| | | INICIO | FINAL | | | |
| 04-09 | ACP | 01-Ene-10 | 31-Dic-11 | - | 25 | 0.06 |

| Contrato de solo Energía (MW) | | | | | | | | | | | | |
|-------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| EMPRESA | ENE | FEB | MAR | ABR | MAY | JUN | JUL | AGO | SEP | OCT | NOV | DIC |
| DME 04-09 (ACP) | 9 | 9 | 11 | 6 | 12 | 17 | 15 | 25 | 25 | 25 | 20 | 20 |

Dicho contrato utiliza la modalidad de potencia equivalente para calcular la energía requerida mediante la formula

$$EAR = (PE / (DMG-R)) \times E$$

Donde:

AER: Energía Asociada Requerida

PE: Potencia Equivalente

DMG: Demanda Máxima de Generación, Mensual Sin Reserva

E: Energía Total Medida

R: Capacidad de Reserva requerida para la confiabilidad de largo plazo

Total de Potencia y Energía de los Contratos Vigentes

A continuación presentamos el total de potencia y energía contratada mensualmente para los años 2011-2024.

Cuadro No 5 Potencia Firme Contratada Mensual (MW)

| AÑOS | ENE | FEB | MAR | ABR | MAY | JUN | JUL | AGO | SEP | OCT | NOV | DIC | TOTAL |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 2011 | 459.93 | 450.93 | 468.93 | 494.93 | 507.93 | 479.93 | 492.93 | 500.93 | 492.93 | 508.43 | 507.93 | 512.93 | 512.93 |
| 2012 | 422.82 | 422.82 | 422.82 | 422.82 | 422.82 | 422.82 | 422.82 | 422.82 | 422.82 | 422.82 | 422.82 | 422.82 | 422.82 |
| 2013 | 501.17 | 501.17 | 501.17 | 501.17 | 501.17 | 501.17 | 501.17 | 501.17 | 501.17 | 501.17 | 452.45 | 452.45 | 501.17 |
| 2014 | 489.66 | 489.66 | 489.66 | 489.66 | 489.66 | 489.66 | 455.85 | 455.85 | 455.85 | 455.85 | 455.85 | 455.85 | 489.66 |
| 2015 | 413.42 | 413.42 | 413.42 | 413.42 | 413.42 | 413.42 | 413.42 | 413.42 | 413.42 | 413.42 | 413.42 | 413.42 | 413.42 |
| 2016 | 413.42 | 413.42 | 413.42 | 413.42 | 413.42 | 413.42 | 413.42 | 413.42 | 413.42 | 413.42 | 413.42 | 413.42 | 413.42 |
| 2017 | 413.42 | 413.42 | 413.42 | 413.42 | 413.42 | 413.42 | 413.42 | 413.42 | 413.42 | 413.42 | 413.42 | 413.42 | 413.42 |
| 2018 | 413.42 | 413.42 | 413.42 | 413.42 | 413.42 | 413.42 | 413.42 | 413.42 | 413.42 | 413.42 | 413.42 | 413.42 | 413.42 |
| 2019 | 266.92 | 266.92 | 266.92 | 266.92 | 266.92 | 266.92 | 266.92 | 266.92 | 266.92 | 266.92 | 266.92 | 266.92 | 266.92 |
| 2020 | 246.92 | 246.92 | 246.92 | 246.92 | 246.92 | 246.92 | 246.92 | 246.92 | 246.92 | 246.92 | 246.92 | 246.92 | 246.92 |
| 2021 | 186.92 | 186.92 | 186.92 | 186.92 | 186.92 | 186.92 | 186.92 | 186.92 | 186.92 | 186.92 | 186.92 | 186.92 | 186.92 |
| 2022 | 163.92 | 163.92 | 163.92 | 163.92 | 163.92 | 163.92 | 163.92 | 163.92 | 163.92 | 163.92 | 163.92 | 163.92 | 163.92 |
| 2023 | 108.00 | 108.00 | 108.00 | 108.00 | 108.00 | 108.00 | 108.00 | 108.00 | 108.00 | 108.00 | 108.00 | 108.00 | 108.00 |
| 2024 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Cuadro No. 6 Energía Asociada Contratada Mensual (GWh)

| AÑOS | ENE | FEB | MAR | ABR | MAY | JUN | JUL | AGO | SEP | OCT | NOV | DIC | TOTAL |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|----------|
| 2011 | 235.55 | 205.74 | 237.52 | 221.18 | 239.20 | 229.65 | 240.01 | 235.19 | 231.82 | 248.61 | 229.48 | 244.23 | 2,798.16 |
| 2012 | 221.88 | 207.11 | 225.33 | 211.26 | 217.27 | 213.35 | 216.02 | 211.72 | 211.05 | 218.90 | 204.24 | 219.84 | 2,577.96 |
| 2013 | 264.37 | 239.11 | 268.26 | 253.72 | 260.98 | 256.43 | 259.58 | 254.32 | 253.49 | 262.97 | 223.53 | 239.61 | 3,036.36 |
| 2014 | 241.87 | 218.48 | 244.50 | 230.24 | 237.03 | 233.58 | 218.32 | 213.54 | 212.77 | 220.90 | 206.65 | 221.56 | 2,699.44 |
| 2015 | 225.10 | 203.31 | 227.55 | 210.78 | 216.99 | 213.82 | 216.22 | 211.48 | 210.72 | 218.77 | 204.66 | 219.45 | 2,578.87 |
| 2016 | 225.18 | 210.59 | 227.64 | 210.86 | 217.07 | 213.91 | 216.31 | 211.57 | 210.81 | 218.86 | 204.74 | 219.56 | 2,587.10 |
| 2017 | 225.25 | 203.44 | 227.71 | 210.93 | 217.14 | 213.97 | 216.37 | 211.63 | 210.87 | 218.93 | 204.80 | 219.64 | 2,580.68 |
| 2018 | 223.32 | 201.70 | 225.67 | 208.91 | 215.09 | 212.01 | 214.36 | 209.63 | 208.87 | 216.87 | 202.93 | 217.57 | 2,556.92 |
| 2019 | 145.61 | 131.50 | 147.14 | 136.22 | 140.24 | 138.23 | 139.77 | 136.68 | 136.19 | 141.40 | 132.31 | 141.88 | 1,667.17 |
| 2020 | 135.47 | 126.71 | 136.90 | 126.84 | 130.59 | 128.72 | 130.15 | 127.28 | 126.82 | 131.67 | 123.21 | 132.13 | 1,556.48 |
| 2021 | 102.57 | 92.63 | 103.65 | 96.04 | 98.88 | 97.46 | 98.54 | 96.37 | 96.02 | 99.69 | 93.28 | 100.05 | 1,175.18 |
| 2022 | 89.96 | 81.24 | 90.91 | 84.23 | 86.72 | 85.47 | 86.43 | 84.52 | 84.21 | 87.44 | 81.82 | 87.76 | 1,030.70 |
| 2023 | 59.27 | 55.44 | 59.90 | 55.50 | 57.14 | 56.32 | 56.94 | 55.69 | 55.49 | 57.61 | 53.91 | 57.83 | 681.03 |
| 2024 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

2 Pronósticos de Demanda 2011-2031

La Proyección de Demanda a utilizar es la correspondiente al Informe Indicativo de Demanda 2011-2031, aprobado mediante la Resolución AN N° 3958-Elec del 1° de noviembre de 2010 y modificado con la Adenda No.1 al Informe Indicativo de Demanda 2011-2031, publicado por el Centro Nacional de Despacho el día 30 de diciembre de 2010.

2.1 Pronóstico de Demanda de EDEMET

Cuadro No. 7 Demanda Máxima de Generación (MW)

| DMG | ENE | FEB | MAR | ABR | MAY | JUN | JUL | AGO | SEP | OCT | NOV | DIC |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 2011 | 620.99 | 636.84 | 661.68 | 678.20 | 676.76 | 645.72 | 633.96 | 628.85 | 649.49 | 641.27 | 612.89 | 640.06 |
| 2012 | 644.31 | 654.56 | 689.61 | 724.11 | 718.97 | 686.24 | 675.47 | 669.11 | 689.17 | 682.23 | 651.18 | 680.78 |
| 2013 | 677.64 | 686.73 | 726.50 | 753.45 | 749.51 | 715.64 | 705.10 | 692.26 | 714.91 | 710.10 | 677.97 | 707.58 |
| 2014 | 707.03 | 715.55 | 758.92 | 787.11 | 785.37 | 750.31 | 738.36 | 720.89 | 745.80 | 740.80 | 706.03 | 736.53 |
| 2015 | 730.49 | 737.67 | 788.81 | 831.47 | 831.93 | 791.59 | 779.91 | 758.77 | 786.74 | 781.49 | 743.62 | 777.19 |
| 2016 | 761.22 | 753.72 | 824.84 | 868.41 | 868.88 | 826.46 | 815.60 | 789.62 | 821.57 | 815.18 | 775.02 | 809.80 |
| 2017 | 797.18 | 787.18 | 866.41 | 910.97 | 911.21 | 864.88 | 854.79 | 825.49 | 859.71 | 854.00 | 813.72 | 849.12 |
| 2018 | 832.43 | 824.05 | 906.46 | 953.23 | 952.97 | 903.01 | 893.96 | 863.13 | 898.51 | 890.26 | 849.30 | 888.00 |
| 2019 | 870.45 | 860.84 | 948.67 | 997.16 | 996.24 | 943.17 | 935.03 | 902.22 | 938.81 | 930.37 | 888.24 | 927.19 |
| 2020 | 902.56 | 875.36 | 986.11 | 1035.76 | 1035.67 | 977.66 | 970.79 | 934.28 | 974.12 | 965.41 | 921.96 | 961.11 |
| 2021 | 945.94 | 934.60 | 1032.09 | 1084.49 | 1081.50 | 1026.43 | 1016.86 | 975.87 | 1018.84 | 1009.85 | 964.63 | 1008.30 |
| 2022 | 989.00 | 991.72 | 1078.13 | 1132.80 | 1130.04 | 1072.10 | 1062.04 | 1020.60 | 1063.19 | 1053.93 | 1006.95 | 1051.81 |
| 2023 | 1035.22 | 1039.15 | 1127.33 | 1184.73 | 1180.52 | 1121.46 | 1113.56 | 1065.80 | 1110.84 | 1101.29 | 1052.42 | 1099.51 |
| 2024 | 1083.21 | 1056.50 | 1178.40 | 1238.61 | 1233.66 | 1170.42 | 1166.64 | 1113.77 | 1160.30 | 1150.43 | 1099.60 | 1149.01 |
| 2025 | 1136.09 | 1127.09 | 1233.55 | 1296.80 | 1290.42 | 1227.95 | 1222.21 | 1163.55 | 1214.16 | 1203.50 | 1152.91 | 1204.67 |
| 2026 | 1189.51 | 1188.02 | 1290.41 | 1356.77 | 1348.96 | 1284.95 | 1278.36 | 1216.96 | 1269.21 | 1258.21 | 1203.08 | 1257.57 |
| 2027 | 1245.62 | 1245.56 | 1350.14 | 1419.78 | 1410.52 | 1344.82 | 1337.35 | 1273.06 | 1327.03 | 1315.68 | 1258.26 | 1315.45 |
| 2028 | 1301.21 | 1275.67 | 1410.91 | 1484.55 | 1473.17 | 1406.37 | 1398.87 | 1329.83 | 1386.48 | 1374.75 | 1315.44 | 1375.84 |
| 2029 | 1370.09 | 1360.46 | 1478.36 | 1554.33 | 1543.71 | 1474.19 | 1464.82 | 1394.28 | 1451.99 | 1439.85 | 1377.48 | 1440.53 |
| 2030 | 1431.33 | 1435.99 | 1546.94 | 1626.67 | 1614.55 | 1542.94 | 1532.56 | 1458.69 | 1518.39 | 1505.84 | 1440.84 | 1507.00 |
| 2031 | 1499.30 | 1505.71 | 1619.31 | 1703.01 | 1689.37 | 1615.49 | 1604.03 | 1526.67 | 1588.45 | 1575.47 | 1507.69 | 1577.14 |

Cuadro No. 8 Energía Requerida en los Puntos de Entrega de EDEMET (GWh)

| GWh | ENE | FEB | MAR | ABR | MAY | JUN | JUL | AGO | SEP | OCT | NOV | DIC |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 2011 | 288.17 | 265.73 | 312.91 | 302.00 | 312.99 | 291.50 | 293.20 | 283.53 | 286.23 | 291.24 | 263.71 | 295.00 |
| 2012 | 299.52 | 283.42 | 326.70 | 315.33 | 326.18 | 303.88 | 305.67 | 295.19 | 297.17 | 303.17 | 274.15 | 306.89 |
| 2013 | 313.49 | 285.63 | 342.49 | 330.07 | 342.07 | 318.80 | 321.00 | 307.22 | 310.11 | 317.44 | 287.13 | 320.87 |
| 2014 | 327.18 | 297.71 | 357.87 | 344.91 | 358.54 | 334.35 | 336.24 | 320.01 | 323.60 | 331.26 | 299.11 | 334.09 |
| 2015 | 340.37 | 309.02 | 374.54 | 360.81 | 376.12 | 349.31 | 351.71 | 333.56 | 338.04 | 346.06 | 311.97 | 349.11 |
| 2016 | 354.71 | 327.07 | 391.68 | 376.87 | 392.85 | 364.72 | 367.83 | 347.14 | 353.03 | 361.00 | 325.16 | 363.78 |
| 2017 | 371.58 | 329.85 | 411.53 | 395.46 | 412.11 | 381.79 | 385.61 | 363.01 | 369.52 | 378.31 | 341.51 | 381.56 |
| 2018 | 388.03 | 345.32 | 430.57 | 413.82 | 431.01 | 398.63 | 403.30 | 379.58 | 386.22 | 394.38 | 356.45 | 399.05 |
| 2019 | 405.86 | 360.83 | 450.72 | 433.00 | 450.70 | 416.46 | 421.93 | 396.87 | 403.64 | 412.25 | 372.90 | 416.77 |
| 2020 | 423.19 | 382.18 | 471.14 | 452.70 | 471.59 | 434.49 | 440.92 | 413.65 | 421.54 | 430.56 | 389.57 | 434.82 |
| 2021 | 443.55 | 393.96 | 493.12 | 474.01 | 492.47 | 456.19 | 461.85 | 432.07 | 440.91 | 450.40 | 407.62 | 456.19 |
| 2022 | 463.75 | 418.07 | 515.13 | 495.14 | 514.58 | 476.50 | 482.39 | 451.89 | 460.11 | 470.07 | 425.51 | 475.89 |
| 2023 | 485.45 | 438.08 | 538.65 | 517.85 | 537.58 | 498.45 | 505.81 | 471.92 | 480.74 | 491.21 | 444.74 | 497.48 |
| 2024 | 507.97 | 461.35 | 563.07 | 541.42 | 561.80 | 520.22 | 529.94 | 493.17 | 502.15 | 513.14 | 464.69 | 519.89 |
| 2025 | 532.79 | 475.17 | 589.44 | 566.87 | 587.67 | 545.82 | 555.20 | 515.23 | 525.48 | 536.83 | 487.24 | 545.10 |
| 2026 | 557.87 | 500.89 | 616.62 | 593.11 | 614.35 | 571.17 | 580.73 | 538.90 | 549.32 | 561.25 | 508.46 | 569.05 |
| 2027 | 584.21 | 525.18 | 645.18 | 620.68 | 642.40 | 597.80 | 607.54 | 563.76 | 574.37 | 586.90 | 531.80 | 595.27 |
| 2028 | 610.29 | 557.15 | 674.24 | 649.01 | 670.95 | 625.18 | 635.51 | 588.92 | 600.11 | 613.28 | 555.99 | 622.61 |
| 2029 | 642.64 | 573.66 | 706.50 | 679.55 | 703.11 | 655.36 | 665.49 | 617.49 | 628.49 | 642.35 | 582.23 | 651.91 |
| 2030 | 671.39 | 605.55 | 739.30 | 711.20 | 735.40 | 685.95 | 696.29 | 646.04 | 657.25 | 671.81 | 609.03 | 682.02 |
| 2031 | 703.30 | 634.99 | 773.91 | 744.61 | 769.51 | 718.22 | 728.79 | 676.17 | 687.61 | 702.90 | 637.32 | 713.78 |

2.2 Pronóstico de Demanda de EDECHI

Cuadro No. 9 Demanda Máxima de Generación (MW)

| DMG | ENE | FEB | MAR | ABR | MAY | JUN | JUL | AGO | SEP | OCT | NOV | DIC |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 2011 | 88.75 | 90.57 | 95.87 | 97.85 | 91.76 | 85.93 | 90.52 | 86.92 | 85.81 | 77.79 | 84.53 | 87.95 |
| 2012 | 92.10 | 90.18 | 98.52 | 103.59 | 96.66 | 90.81 | 95.66 | 91.95 | 90.95 | 82.45 | 89.67 | 93.46 |
| 2013 | 96.45 | 93.94 | 102.61 | 106.58 | 99.41 | 93.63 | 98.88 | 94.83 | 94.10 | 85.22 | 92.90 | 96.73 |
| 2014 | 100.34 | 98.63 | 106.23 | 110.12 | 102.81 | 97.25 | 102.40 | 97.85 | 96.77 | 88.01 | 96.06 | 99.93 |
| 2015 | 104.22 | 100.48 | 109.54 | 115.41 | 107.59 | 102.05 | 107.37 | 102.23 | 100.88 | 91.94 | 100.13 | 104.59 |
| 2016 | 107.75 | 100.50 | 113.28 | 119.89 | 111.61 | 106.02 | 111.55 | 105.82 | 104.44 | 95.07 | 103.64 | 108.31 |
| 2017 | 112.22 | 104.25 | 118.01 | 124.79 | 115.82 | 110.31 | 116.08 | 109.71 | 108.48 | 98.46 | 107.64 | 112.54 |
| 2018 | 116.42 | 108.14 | 122.53 | 129.17 | 120.34 | 114.34 | 120.34 | 113.56 | 112.29 | 101.92 | 111.40 | 116.50 |
| 2019 | 120.74 | 112.60 | 127.53 | 133.98 | 124.98 | 118.51 | 124.74 | 117.17 | 116.06 | 105.43 | 115.34 | 120.42 |
| 2020 | 124.18 | 112.98 | 131.77 | 138.25 | 129.01 | 121.86 | 128.24 | 120.53 | 119.17 | 108.44 | 118.62 | 123.69 |
| 2021 | 128.81 | 121.77 | 136.87 | 143.54 | 134.00 | 126.31 | 132.77 | 124.78 | 123.36 | 112.07 | 122.76 | 128.06 |
| 2022 | 133.84 | 126.73 | 141.45 | 148.56 | 138.81 | 131.13 | 137.86 | 129.38 | 127.91 | 116.10 | 126.83 | 132.81 |
| 2023 | 138.98 | 132.22 | 145.96 | 154.01 | 143.54 | 136.06 | 143.07 | 134.09 | 132.57 | 120.51 | 131.43 | 137.66 |
| 2024 | 144.23 | 133.67 | 151.35 | 159.59 | 148.59 | 141.09 | 148.38 | 138.90 | 137.31 | 124.82 | 136.12 | 142.61 |
| 2025 | 149.92 | 143.03 | 156.85 | 165.66 | 153.71 | 146.35 | 154.14 | 144.11 | 142.46 | 129.49 | 141.20 | 147.98 |
| 2026 | 155.66 | 148.94 | 162.60 | 172.02 | 159.09 | 151.87 | 159.96 | 149.37 | 147.66 | 134.21 | 146.34 | 153.40 |
| 2027 | 161.69 | 155.12 | 168.28 | 178.48 | 164.77 | 157.64 | 166.05 | 154.89 | 153.11 | 139.16 | 151.72 | 159.09 |
| 2028 | 167.88 | 155.91 | 174.33 | 185.34 | 171.03 | 163.58 | 172.32 | 160.56 | 158.70 | 144.24 | 157.25 | 164.93 |
| 2029 | 174.37 | 168.15 | 180.72 | 192.14 | 177.42 | 169.81 | 178.90 | 166.51 | 164.58 | 149.58 | 163.06 | 171.06 |
| 2030 | 181.15 | 175.12 | 187.22 | 199.25 | 183.91 | 176.31 | 185.76 | 172.72 | 170.72 | 155.15 | 169.12 | 177.46 |
| 2031 | 188.17 | 182.38 | 194.18 | 206.85 | 190.86 | 183.04 | 192.87 | 179.14 | 177.06 | 160.91 | 175.39 | 184.08 |

Cuadro No. 10 Energía Requerida en los Puntos de Entrega de EDECHI (GWh)

| GWh | ENE | FEB | MAR | ABR | MAY | JUN | JUL | AGO | SEP | OCT | NOV | DIC |
|------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 2011 | 45.27 | 42.57 | 49.69 | 47.79 | 46.41 | 44.38 | 44.19 | 41.89 | 41.92 | 42.41 | 40.55 | 44.64 |
| 2012 | 47.06 | 43.98 | 51.16 | 49.47 | 47.97 | 46.01 | 45.69 | 43.37 | 43.48 | 43.98 | 42.09 | 46.40 |
| 2013 | 49.05 | 44.01 | 53.03 | 51.21 | 49.63 | 47.72 | 47.52 | 45.00 | 45.26 | 45.73 | 43.88 | 48.32 |
| 2014 | 51.04 | 46.22 | 54.90 | 52.92 | 51.33 | 49.58 | 49.21 | 46.43 | 46.55 | 47.24 | 45.38 | 49.92 |
| 2015 | 53.38 | 47.41 | 57.01 | 54.92 | 53.20 | 51.52 | 51.10 | 48.04 | 48.06 | 48.87 | 46.84 | 51.75 |
| 2016 | 55.20 | 49.12 | 58.96 | 57.06 | 55.19 | 53.53 | 53.10 | 49.74 | 49.76 | 50.54 | 48.49 | 53.60 |
| 2017 | 57.49 | 49.20 | 61.43 | 59.40 | 57.28 | 55.70 | 55.26 | 51.57 | 51.69 | 52.35 | 50.37 | 55.70 |
| 2018 | 59.65 | 51.04 | 63.79 | 61.49 | 59.52 | 57.75 | 57.30 | 53.39 | 53.51 | 54.19 | 52.13 | 57.67 |
| 2019 | 61.87 | 53.15 | 66.40 | 63.79 | 61.83 | 59.86 | 59.40 | 55.09 | 55.32 | 56.07 | 53.98 | 59.61 |
| 2020 | 63.99 | 55.55 | 69.00 | 66.26 | 64.24 | 61.96 | 61.47 | 57.04 | 57.17 | 58.05 | 55.88 | 61.63 |
| 2021 | 66.39 | 57.82 | 71.68 | 68.80 | 66.73 | 61.42 | 63.64 | 59.06 | 59.19 | 59.99 | 57.84 | 63.82 |
| 2022 | 68.99 | 60.17 | 74.08 | 71.21 | 69.13 | 66.68 | 66.09 | 61.24 | 61.38 | 62.16 | 59.76 | 66.19 |
| 2023 | 71.64 | 62.79 | 76.45 | 73.83 | 71.50 | 69.20 | 68.59 | 63.48 | 63.62 | 64.53 | 61.93 | 68.61 |
| 2024 | 74.36 | 65.75 | 79.28 | 76.51 | 74.01 | 71.76 | 71.15 | 65.76 | 65.90 | 66.84 | 64.15 | 71.09 |
| 2025 | 77.29 | 67.94 | 82.17 | 79.43 | 76.57 | 74.44 | 73.91 | 68.23 | 68.38 | 69.35 | 66.55 | 73.77 |
| 2026 | 80.26 | 70.75 | 85.19 | 82.49 | 79.26 | 77.25 | 76.71 | 70.73 | 70.88 | 71.89 | 68.98 | 76.48 |
| 2027 | 83.38 | 73.69 | 88.17 | 85.59 | 82.09 | 80.20 | 79.64 | 73.35 | 73.50 | 74.54 | 71.52 | 79.32 |
| 2028 | 86.58 | 76.72 | 91.34 | 88.89 | 85.22 | 83.22 | 82.65 | 76.04 | 76.20 | 77.27 | 74.13 | 82.24 |
| 2029 | 89.93 | 79.90 | 94.70 | 92.16 | 88.41 | 86.40 | 85.82 | 78.87 | 79.03 | 80.14 | 76.88 | 85.31 |
| 2030 | 93.44 | 83.21 | 98.11 | 95.58 | 91.65 | 89.72 | 89.12 | 81.82 | 81.98 | 83.13 | 79.74 | 88.51 |
| 2031 | 97.06 | 86.68 | 101.77 | 99.23 | 95.12 | 93.15 | 92.53 | 84.87 | 85.03 | 86.22 | 82.71 | 91.82 |

2.3 Pronóstico de Demanda de ENSA

Cuadro No. 11 Demanda Máxima de Generación (MW)

| DMG | ENE | FEB | MAR | ABR | MAY | JUN | JUL | AGO | SEP | OCT | NOV | DIC |
|------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 2011 | 451.60 | 458.95 | 471.95 | 488.76 | 485.96 | 470.06 | 474.65 | 483.77 | 485.61 | 481.27 | 469.63 | 488.61 |
| 2012 | 476.67 | 467.70 | 498.12 | 528.48 | 523.82 | 506.69 | 512.93 | 522.78 | 524.77 | 520.08 | 507.51 | 528.06 |
| 2013 | 506.92 | 515.12 | 529.71 | 555.94 | 551.04 | 533.02 | 539.58 | 549.94 | 552.04 | 547.10 | 533.88 | 555.35 |
| 2014 | 532.82 | 541.35 | 556.75 | 584.33 | 579.18 | 560.24 | 567.13 | 578.03 | 580.23 | 575.04 | 561.15 | 583.59 |
| 2015 | 550.17 | 559.06 | 574.89 | 613.50 | 608.10 | 588.21 | 595.45 | 606.89 | 609.20 | 603.75 | 589.17 | 612.66 |
| 2016 | 569.15 | 558.40 | 594.72 | 634.66 | 629.07 | 608.50 | 615.99 | 627.82 | 630.20 | 624.58 | 609.49 | 633.72 |
| 2017 | 584.48 | 593.92 | 610.73 | 651.74 | 646.00 | 624.88 | 632.57 | 644.72 | 647.17 | 641.39 | 625.90 | 650.74 |
| 2018 | 604.32 | 614.02 | 631.47 | 673.87 | 667.93 | 646.10 | 654.05 | 666.60 | 669.14 | 663.16 | 647.15 | 672.77 |
| 2019 | 629.25 | 639.42 | 657.52 | 701.66 | 695.48 | 672.74 | 681.02 | 694.10 | 696.74 | 690.51 | 673.84 | 700.44 |
| 2020 | 653.83 | 641.49 | 683.20 | 728.42 | 722.00 | 698.40 | 707.00 | 720.57 | 723.31 | 716.85 | 699.54 | 727.08 |
| 2021 | 690.40 | 701.56 | 721.41 | 769.14 | 762.37 | 737.46 | 746.53 | 760.86 | 763.75 | 756.93 | 738.65 | 767.63 |
| 2022 | 719.76 | 731.40 | 752.09 | 801.85 | 794.79 | 768.82 | 778.28 | 793.21 | 796.23 | 789.12 | 770.07 | 800.19 |
| 2023 | 736.34 | 722.38 | 769.41 | 820.32 | 813.09 | 786.53 | 796.20 | 811.48 | 814.56 | 807.29 | 787.81 | 818.59 |
| 2024 | 757.96 | 743.59 | 792.00 | 844.40 | 836.96 | 809.62 | 819.58 | 835.30 | 838.48 | 830.99 | 810.93 | 842.56 |
| 2025 | 780.90 | 793.53 | 815.97 | 869.95 | 862.29 | 834.12 | 844.38 | 860.58 | 863.85 | 856.14 | 835.47 | 868.00 |
| 2026 | 813.25 | 826.40 | 849.77 | 905.98 | 898.00 | 868.67 | 879.35 | 896.22 | 899.63 | 891.60 | 870.08 | 903.88 |
| 2027 | 849.23 | 862.97 | 887.38 | 946.06 | 937.74 | 907.11 | 918.26 | 935.88 | 939.43 | 931.05 | 908.58 | 943.80 |
| 2028 | 895.39 | 878.44 | 935.61 | 997.48 | 988.70 | 956.41 | 968.17 | 986.74 | 990.48 | 981.65 | 957.96 | 994.99 |
| 2029 | 933.99 | 949.10 | 975.94 | 1040.47 | 1031.31 | 997.63 | 1009.90 | 1029.26 | 1033.17 | 1023.95 | 999.25 | 1037.80 |
| 2030 | 957.50 | 972.99 | 1000.50 | 1066.65 | 1057.26 | 1022.74 | 1035.31 | 1055.16 | 1059.17 | 1049.72 | 1024.40 | 1063.87 |
| 2031 | 985.34 | 1001.28 | 1029.59 | 1097.66 | 1088.00 | 1052.47 | 1065.41 | 1085.84 | 1089.97 | 1080.24 | 1054.18 | 1094.75 |

Cuadro No. 12 Energía Requerida en los Puntos de Entrega de ENSA (GWh)

| GWh | ENE | FEB | MAR | ABR | MAY | JUN | JUL | AGO | SEP | OCT | NOV | DIC |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 2011 | 229.82 | 210.93 | 242.71 | 239.77 | 244.67 | 233.30 | 238.79 | 238.00 | 238.04 | 244.95 | 223.65 | 249.34 |
| 2012 | 243.07 | 223.07 | 256.68 | 253.58 | 258.76 | 246.73 | 252.54 | 251.71 | 251.75 | 259.05 | 236.54 | 263.68 |
| 2013 | 257.27 | 236.10 | 271.67 | 268.39 | 273.88 | 261.14 | 267.29 | 266.41 | 266.45 | 274.18 | 250.35 | 279.06 |
| 2014 | 270.46 | 248.19 | 285.59 | 282.14 | 287.92 | 274.53 | 280.99 | 280.06 | 280.11 | 288.24 | 263.19 | 293.35 |
| 2015 | 281.23 | 258.08 | 296.97 | 293.38 | 299.38 | 285.46 | 292.18 | 291.21 | 291.27 | 299.71 | 273.67 | 305.03 |
| 2016 | 290.96 | 267.01 | 307.24 | 303.52 | 309.74 | 295.33 | 302.28 | 301.28 | 301.34 | 310.08 | 283.13 | 315.58 |
| 2017 | 298.81 | 274.21 | 315.53 | 311.71 | 318.09 | 303.29 | 310.44 | 309.41 | 309.47 | 318.44 | 290.77 | 324.09 |
| 2018 | 308.99 | 283.55 | 326.27 | 322.32 | 328.92 | 313.61 | 321.00 | 319.94 | 320.00 | 329.28 | 300.67 | 335.13 |
| 2019 | 321.77 | 295.28 | 339.77 | 335.65 | 342.53 | 326.59 | 334.28 | 333.18 | 333.24 | 342.90 | 313.11 | 348.99 |
| 2020 | 336.25 | 308.57 | 355.06 | 350.76 | 357.94 | 341.28 | 349.32 | 348.17 | 348.23 | 358.33 | 327.20 | 364.70 |
| 2021 | 355.12 | 325.88 | 374.98 | 370.43 | 378.03 | 360.42 | 368.91 | 367.70 | 367.77 | 378.43 | 345.55 | 385.16 |
| 2022 | 370.27 | 339.78 | 390.97 | 386.23 | 394.15 | 375.79 | 384.65 | 383.38 | 383.45 | 394.56 | 360.29 | 401.58 |
| 2023 | 378.81 | 347.62 | 399.99 | 395.14 | 403.24 | 384.46 | 393.52 | 392.22 | 392.30 | 403.66 | 368.60 | 410.85 |
| 2024 | 389.96 | 357.85 | 411.76 | 406.76 | 415.10 | 395.77 | 405.09 | 403.76 | 403.83 | 415.53 | 379.44 | 422.93 |
| 2025 | 401.78 | 368.70 | 424.25 | 419.09 | 427.69 | 407.77 | 417.37 | 416.00 | 416.08 | 428.13 | 390.95 | 435.76 |
| 2026 | 418.47 | 384.02 | 441.87 | 436.50 | 445.45 | 424.70 | 434.70 | 433.28 | 433.36 | 445.91 | 407.18 | 453.85 |
| 2027 | 437.04 | 401.06 | 461.48 | 455.86 | 465.22 | 443.54 | 453.99 | 452.50 | 452.58 | 465.69 | 425.25 | 473.99 |
| 2028 | 460.86 | 422.92 | 486.63 | 480.71 | 490.58 | 467.71 | 478.73 | 477.16 | 477.25 | 491.07 | 448.43 | 499.82 |
| 2029 | 480.78 | 441.20 | 507.66 | 501.48 | 511.77 | 487.91 | 499.41 | 497.78 | 497.87 | 512.29 | 467.80 | 521.42 |
| 2030 | 492.90 | 452.32 | 520.45 | 514.11 | 524.67 | 500.21 | 512.00 | 510.33 | 510.42 | 525.20 | 479.59 | 534.56 |
| 2031 | 507.26 | 465.49 | 535.61 | 529.09 | 539.96 | 514.78 | 526.91 | 525.19 | 525.29 | 540.49 | 493.56 | 550.13 |

3 Niveles de Contratación de Potencia y Energía

3.1 Niveles de contratación de Potencia

De acuerdo a la Potencia Firme contratada de cada Empresa Distribuidora (Cuadros No. 1, 3, 5) y el Pronóstico de Demanda Máxima de Generación (DMG) de cada Empresa Distribuidora (Cuadros No. 7, 9, 11) se obtienen los niveles de contratación de potencia actuales vs el porcentaje mínimo de contratación regulatorio.

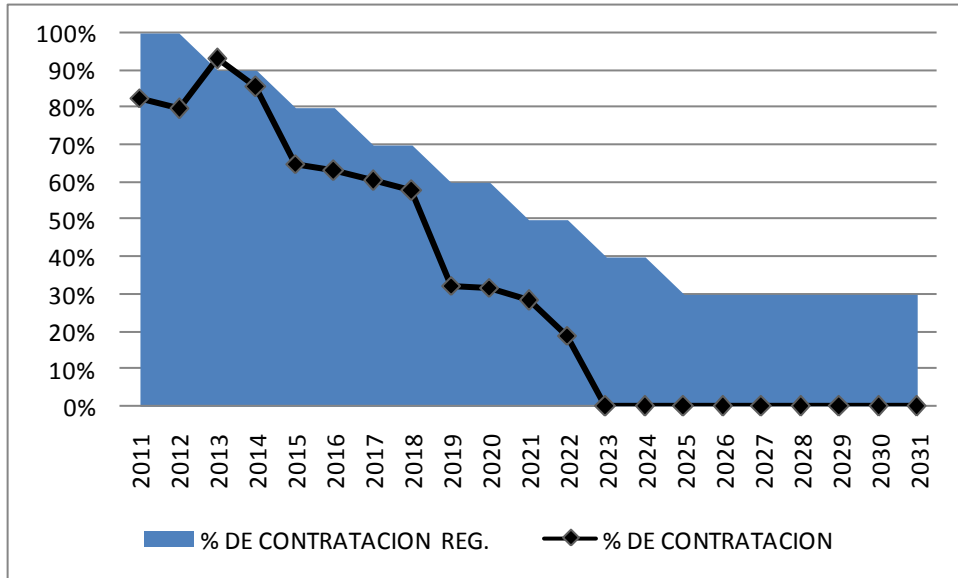
3.1.1 Nivel de contratación actual de EDEMET

Cuadro No. 13 Niveles de Contratación de Potencia Actual vs Nivel de contratación Regulatorio

| AÑO | ENE | FEB | MAR | ABR | MAY | JUN | JUL | AGO | SEP | OCT | NOV | DIC | % MAX | % REG |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| 2011 | 77.47% | 79.31% | 72.25% | 70.64% | 69.16% | 74.50% | 82.51% | 74.75% | 74.38% | 73.61% | 76.37% | 73.13% | 82.51% | 100% |
| 2012 | 79.73% | 78.48% | 74.49% | 70.94% | 71.45% | 74.86% | 76.05% | 76.77% | 74.54% | 75.30% | 78.89% | 75.46% | 79.73% | 100% |
| 2013 | 93.05% | 91.82% | 86.79% | 83.69% | 84.13% | 88.11% | 89.43% | 91.09% | 88.20% | 88.80% | 83.76% | 80.25% | 93.05% | 90% |
| 2014 | 85.59% | 84.57% | 79.74% | 76.88% | 77.05% | 80.65% | 66.66% | 68.27% | 65.99% | 66.44% | 69.71% | 66.83% | 85.59% | 90% |
| 2015 | 65.05% | 64.42% | 60.24% | 57.15% | 57.12% | 60.03% | 60.93% | 62.63% | 60.40% | 60.81% | 63.90% | 61.14% | 65.05% | 80% |
| 2016 | 62.43% | 63.05% | 57.61% | 54.72% | 54.69% | 57.50% | 58.27% | 60.18% | 57.84% | 58.30% | 61.32% | 58.68% | 63.05% | 80% |
| 2017 | 59.61% | 60.37% | 54.85% | 52.17% | 52.15% | 54.95% | 55.59% | 57.57% | 55.28% | 55.64% | 58.40% | 55.96% | 60.37% | 70% |
| 2018 | 57.09% | 57.67% | 52.42% | 49.85% | 49.87% | 52.62% | 53.16% | 55.06% | 52.89% | 53.38% | 55.95% | 53.51% | 57.67% | 70% |
| 2019 | 32.08% | 32.43% | 29.43% | 28.00% | 28.03% | 29.60% | 29.86% | 30.95% | 29.74% | 30.01% | 31.43% | 30.11% | 32.43% | 60% |
| 2020 | 30.94% | 31.90% | 28.31% | 26.96% | 26.96% | 28.56% | 28.76% | 29.88% | 28.66% | 28.92% | 30.28% | 29.05% | 31.90% | 60% |
| 2021 | 27.93% | 28.27% | 25.60% | 24.36% | 24.43% | 25.74% | 25.98% | 27.07% | 25.93% | 26.16% | 27.39% | 26.20% | 28.27% | 50% |
| 2022 | 18.93% | 18.88% | 17.36% | 16.53% | 16.57% | 17.46% | 17.63% | 18.34% | 17.61% | 17.76% | 18.59% | 17.80% | 18.93% | 50% |
| 2023 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 40% |
| 2024 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 40% |
| 2025 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 30% |
| 2026 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 30% |
| 2027 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 30% |
| 2028 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 30% |
| 2029 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 30% |
| 2030 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 30% |
| 2031 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 30% |

En la grafica No 1, se muestra el Porcentaje de Contratación actual de potencia firme vs el porcentaje de contratación regulatorio.

Grafico No. 1 Nivel de Contratación de Potencia (%) 2011-2031



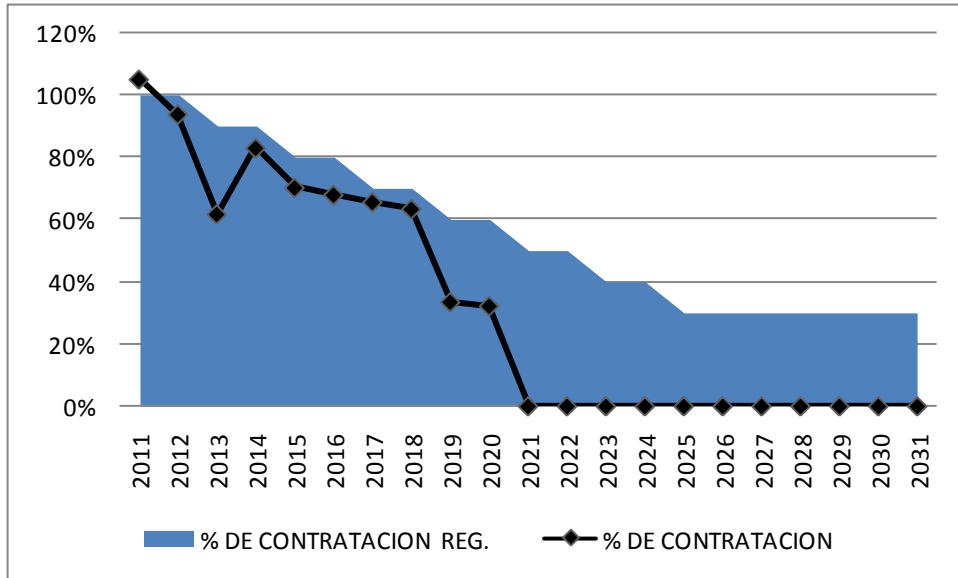
3.1.2 Nivel de Contratación Actual de EDECHI

Cuadro No. 14 Niveles de Contratación de Potencia Actual vs Nivel de contratación Regulatorio

| AÑO | ENE | FEB | MAR | ABR | MAY | JUN | JUL | AGO | SEP | OCT | NOV | DIC | % MAX | % REG |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|--------|--------|---------|-------|
| 2011 | 92.26% | 90.41% | 85.41% | 83.68% | 89.24% | 95.29% | 90.45% | 94.21% | 95.43% | 105.26% | 96.86% | 93.10% | 105.26% | 100% |
| 2012 | 92.06% | 94.01% | 86.05% | 81.85% | 87.71% | 93.36% | 70.78% | 73.64% | 74.45% | 82.13% | 75.52% | 72.45% | 94.01% | 100% |
| 2013 | 54.65% | 56.11% | 51.37% | 49.46% | 53.02% | 56.30% | 53.31% | 55.58% | 56.02% | 61.86% | 56.74% | 54.49% | 61.86% | 90% |
| 2014 | 72.95% | 74.22% | 68.91% | 66.47% | 71.20% | 75.27% | 71.48% | 74.81% | 75.64% | 83.17% | 76.20% | 73.25% | 83.17% | 90% |
| 2015 | 62.09% | 64.40% | 59.08% | 56.07% | 60.15% | 63.41% | 60.27% | 63.30% | 64.15% | 70.39% | 64.63% | 61.87% | 70.39% | 80% |
| 2016 | 60.06% | 64.39% | 57.13% | 53.98% | 57.98% | 61.04% | 58.01% | 61.15% | 61.96% | 68.07% | 62.44% | 59.74% | 68.07% | 80% |
| 2017 | 57.67% | 62.08% | 54.84% | 51.86% | 55.87% | 58.67% | 55.75% | 58.98% | 59.65% | 65.72% | 60.12% | 57.50% | 65.72% | 70% |
| 2018 | 55.59% | 59.84% | 52.81% | 50.10% | 53.77% | 56.60% | 53.78% | 56.98% | 57.63% | 63.50% | 58.09% | 55.55% | 63.50% | 70% |
| 2019 | 29.32% | 31.44% | 27.76% | 26.42% | 28.32% | 29.87% | 28.38% | 30.21% | 30.50% | 33.58% | 30.69% | 29.40% | 33.58% | 60% |
| 2020 | 28.19% | 30.98% | 26.56% | 25.32% | 27.13% | 28.72% | 27.29% | 29.04% | 29.37% | 32.27% | 29.51% | 28.30% | 32.27% | 60% |
| 2021 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 50% |
| 2022 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 50% |
| 2023 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 40% |
| 2024 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 40% |
| 2025 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 30% |
| 2026 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 30% |
| 2027 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 30% |
| 2028 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 30% |
| 2029 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 30% |
| 2030 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 30% |
| 2031 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 30% |

En la grafica No 2, se muestra el Porcentaje de Contratación actual de potencia firme vs el porcentaje de contratación regulatorio.

Grafico No. 2 Nivel de Contratación de Potencia (%) 2011-2031



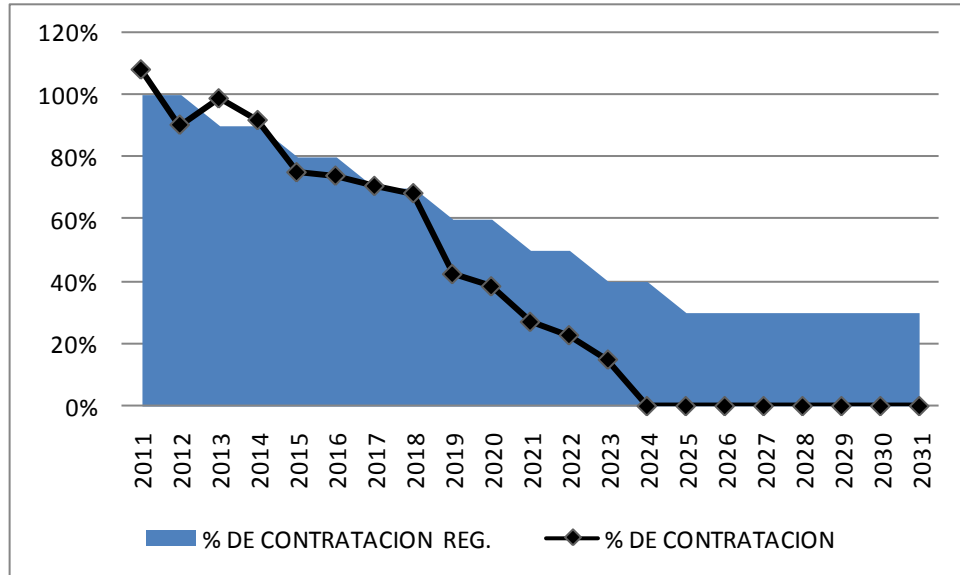
3.1.3 Nivel de Contratación Actual de ENSA

Cuadro No. 15 Niveles de Contratación de Potencia Actual vs Nivel de contratación Regulatorio

| AÑO | ENE | FEB | MAR | ABR | MAY | JUN | JUL | AGO | SEP | OCT | NOV | DIC | % MAX | % REG |
|------|---------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------|
| 2011 | 101.84% | 98.25% | 99.36% | 101.26% | 104.52% | 102.10% | 103.85% | 103.55% | 101.51% | 105.64% | 108.15% | 104.98% | 108.15% | 100% |
| 2012 | 88.70% | 90.40% | 84.88% | 80.01% | 80.72% | 83.45% | 82.43% | 80.88% | 80.57% | 81.30% | 83.31% | 80.07% | 90.40% | 100% |
| 2013 | 98.86% | 97.29% | 94.61% | 90.15% | 90.95% | 94.03% | 92.88% | 91.13% | 90.79% | 91.60% | 84.75% | 81.47% | 98.86% | 90% |
| 2014 | 91.90% | 90.45% | 87.95% | 83.80% | 84.54% | 87.40% | 80.38% | 78.86% | 78.56% | 79.27% | 81.24% | 78.11% | 91.90% | 90% |
| 2015 | 75.14% | 73.95% | 71.91% | 67.39% | 67.99% | 70.28% | 69.43% | 68.12% | 67.86% | 68.47% | 70.17% | 67.48% | 75.14% | 80% |
| 2016 | 72.64% | 74.04% | 69.52% | 65.14% | 65.72% | 67.94% | 67.11% | 65.85% | 65.60% | 66.19% | 67.83% | 65.24% | 74.04% | 80% |
| 2017 | 70.73% | 69.61% | 67.69% | 63.43% | 64.00% | 66.16% | 65.36% | 64.12% | 63.88% | 64.46% | 66.05% | 63.53% | 70.73% | 70% |
| 2018 | 68.41% | 67.33% | 65.47% | 61.35% | 61.90% | 63.99% | 63.21% | 62.02% | 61.78% | 62.34% | 63.88% | 61.45% | 68.41% | 70% |
| 2019 | 42.42% | 41.74% | 40.60% | 38.04% | 38.38% | 39.68% | 39.19% | 38.46% | 38.31% | 38.66% | 39.61% | 38.11% | 42.42% | 60% |
| 2020 | 37.77% | 38.49% | 36.14% | 33.90% | 34.20% | 35.35% | 34.93% | 34.27% | 34.14% | 34.45% | 35.30% | 33.96% | 38.49% | 60% |
| 2021 | 27.07% | 26.64% | 25.91% | 24.30% | 24.52% | 25.35% | 25.04% | 24.57% | 24.47% | 24.69% | 25.31% | 24.35% | 27.07% | 50% |
| 2022 | 22.77% | 22.41% | 21.80% | 20.44% | 20.62% | 21.32% | 21.06% | 20.67% | 20.59% | 20.77% | 21.29% | 20.49% | 22.77% | 50% |
| 2023 | 14.67% | 14.95% | 14.04% | 13.17% | 13.28% | 13.73% | 13.56% | 13.31% | 13.26% | 13.38% | 13.71% | 13.19% | 14.95% | 40% |
| 2024 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 40% |
| 2025 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 30% |
| 2026 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 30% |
| 2027 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 30% |
| 2028 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 30% |
| 2029 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 30% |
| 2030 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 30% |
| 2031 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 30% |

En la grafica No 3, se muestra el Porcentaje de Contratación actual de potencia firme vs el porcentaje de contratación regulatorio.

Grafico No. 3 Nivel de Contratación de Potencia (%) 2011-2031



3.2 Nivel de Contratación de Energía

De acuerdo a la proyección anual de Energía Asociada a los Contratos de cada Empresa Distribuidora (Cuadros No. 2, 4, 6) y el Pronostico Anual de Energía Requerida de cada Empresa Distribuidora (Cuadros No. 8, 10, 12), se obtienen los niveles de contratación de Energía vs el porcentaje mínimo regulatorio establecido.

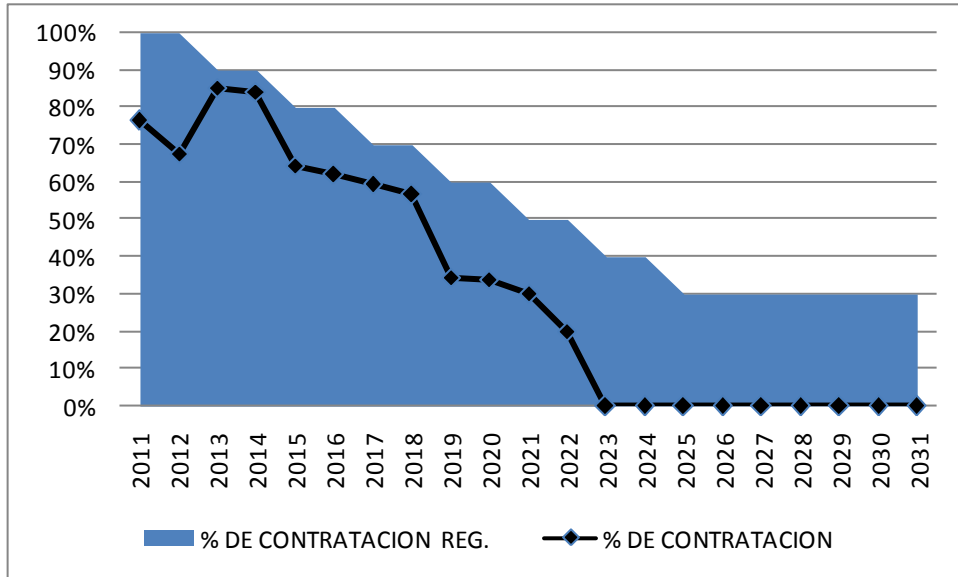
3.2.1 Nivel de contratación actual de EDEMET

Cuadro No. 16 Niveles de Energía Asociada a Contratos Actuales vs Niveles de Contratación Regulatorio

| AÑOS | ENE | FEB | MAR | ABR | MAY | JUN | JUL | AGO | SEP | OCT | NOV | DIC | % MAX | % REG |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 2011 | 76.0% | 75.1% | 73.7% | 72.9% | 73.0% | 74.6% | 75.2% | 75.5% | 74.4% | 74.9% | 76.5% | 74.9% | 76.5% | 100% |
| 2012 | 67.8% | 67.3% | 65.7% | 64.3% | 64.5% | 65.9% | 66.3% | 66.6% | 65.7% | 66.1% | 67.4% | 66.1% | 67.8% | 100% |
| 2013 | 85.1% | 84.3% | 81.0% | 78.9% | 79.2% | 81.9% | 82.7% | 83.8% | 81.9% | 82.4% | 76.8% | 74.2% | 85.1% | 90% |
| 2014 | 84.1% | 83.5% | 80.1% | 78.1% | 78.2% | 80.7% | 65.2% | 66.2% | 64.8% | 65.1% | 67.1% | 65.3% | 84.1% | 90% |
| 2015 | 64.3% | 63.9% | 61.3% | 59.4% | 59.4% | 61.2% | 61.8% | 62.8% | 61.4% | 61.7% | 63.6% | 61.9% | 64.3% | 80% |
| 2016 | 61.7% | 62.1% | 58.7% | 56.9% | 56.8% | 58.6% | 59.1% | 60.3% | 58.8% | 59.1% | 61.0% | 59.3% | 62.1% | 80% |
| 2017 | 58.9% | 59.3% | 55.9% | 54.2% | 54.2% | 55.9% | 56.4% | 57.6% | 56.2% | 56.4% | 58.1% | 56.6% | 59.3% | 70% |
| 2018 | 56.3% | 56.7% | 53.4% | 51.8% | 51.8% | 53.5% | 53.9% | 55.1% | 53.7% | 54.0% | 55.6% | 54.1% | 56.7% | 70% |
| 2019 | 34.2% | 34.6% | 31.4% | 29.9% | 29.9% | 31.6% | 31.9% | 33.0% | 31.7% | 32.0% | 33.5% | 32.1% | 34.6% | 60% |
| 2020 | 33.0% | 34.0% | 30.2% | 28.8% | 28.8% | 30.5% | 30.7% | 31.9% | 30.6% | 30.9% | 32.3% | 31.0% | 34.0% | 60% |
| 2021 | 29.8% | 30.2% | 27.3% | 26.0% | 26.1% | 27.5% | 27.7% | 28.9% | 27.7% | 27.9% | 29.2% | 28.0% | 30.2% | 50% |
| 2022 | 20.2% | 20.1% | 18.5% | 17.6% | 17.7% | 18.6% | 18.8% | 19.6% | 18.8% | 18.9% | 19.8% | 19.0% | 20.2% | 50% |
| 2023 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 40% |
| 2024 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 40% |
| 2025 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 30% |
| 2026 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 30% |
| 2027 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 30% |
| 2028 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 30% |
| 2029 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 30% |
| 2030 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 30% |
| 2031 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 30% |

En la grafica No 4, se muestra el Porcentaje de Contratación actual de energía vs el porcentaje de contratación regulatorio.

Grafico No. 4 Nivel de Contratación de Energía (%) 2011-2031



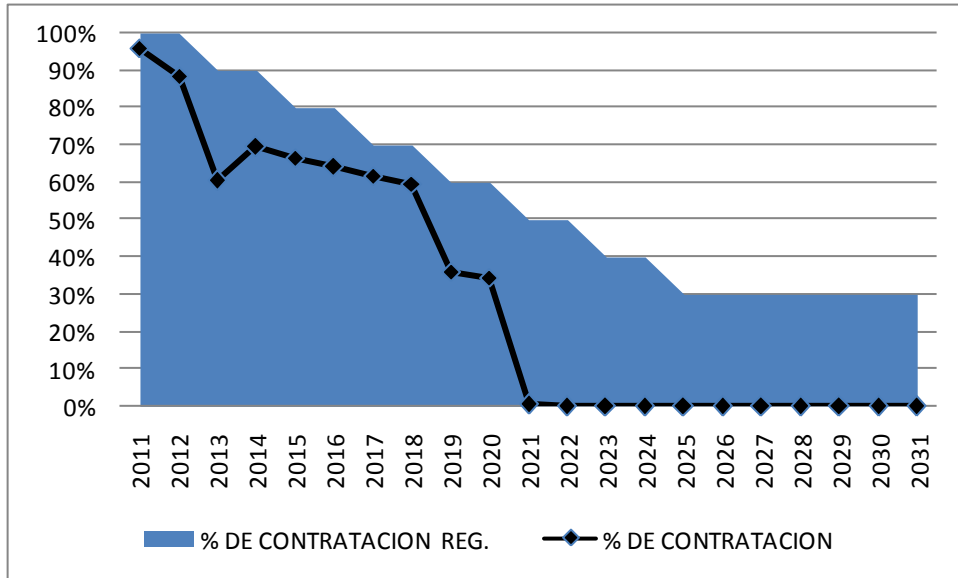
3.2.2 Nivel de Contratación Actual de EDECHI

Cuadro No. 17 Niveles de Energía Asociada a Contratos Actuales vs Niveles de Contratación Regulatorio

| AÑOS | ENE | FEB | MAR | ABR | MAY | JUN | JUL | AGO | SEP | OCT | NOV | DIC | % MAX | % REG |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 2011 | 88.9% | 87.7% | 85.6% | 84.8% | 88.3% | 90.7% | 88.6% | 90.6% | 91.3% | 95.8% | 91.2% | 89.7% | 95.8% | 100% |
| 2012 | 87.2% | 88.2% | 84.6% | 82.7% | 86.3% | 88.3% | 70.7% | 72.2% | 72.7% | 76.9% | 73.3% | 71.6% | 88.3% | 100% |
| 2013 | 55.4% | 56.4% | 53.1% | 51.7% | 54.2% | 56.5% | 54.4% | 56.0% | 56.3% | 60.5% | 56.9% | 55.3% | 60.5% | 90% |
| 2014 | 64.2% | 64.9% | 62.2% | 60.9% | 63.3% | 65.4% | 63.5% | 65.2% | 65.6% | 69.4% | 65.9% | 64.4% | 69.4% | 90% |
| 2015 | 61.6% | 62.9% | 59.9% | 58.1% | 60.5% | 62.4% | 60.6% | 62.3% | 62.8% | 66.4% | 63.1% | 61.5% | 66.4% | 80% |
| 2016 | 59.5% | 62.0% | 57.8% | 56.0% | 58.3% | 60.0% | 58.3% | 60.1% | 60.6% | 64.1% | 60.8% | 59.3% | 64.1% | 80% |
| 2017 | 57.1% | 59.7% | 55.5% | 53.8% | 56.1% | 57.7% | 56.0% | 57.9% | 58.3% | 61.8% | 58.5% | 57.0% | 61.8% | 70% |
| 2018 | 55.1% | 57.6% | 53.5% | 51.9% | 54.1% | 55.7% | 54.1% | 55.9% | 56.3% | 59.7% | 56.6% | 55.1% | 59.7% | 70% |
| 2019 | 31.5% | 33.7% | 29.8% | 28.4% | 30.4% | 32.1% | 30.5% | 32.4% | 32.7% | 36.0% | 32.9% | 31.6% | 36.0% | 60% |
| 2020 | 30.1% | 33.0% | 28.3% | 27.0% | 28.9% | 30.6% | 29.1% | 31.0% | 31.3% | 34.4% | 31.5% | 30.2% | 34.4% | 60% |
| 2021 | 0.5% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.5% | 50% |
| 2022 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 50% |
| 2023 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 40% |
| 2024 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 40% |
| 2025 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 30% |
| 2026 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 30% |
| 2027 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 30% |
| 2028 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 30% |
| 2029 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 30% |
| 2030 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 30% |
| 2031 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 30% |

En la grafica No 5, se muestra el Porcentaje de Contratación actual de energía vs el porcentaje de contratación regulatorio.

Grafico No. 5 Nivel de Contratación de Energía (%) 2011-2031



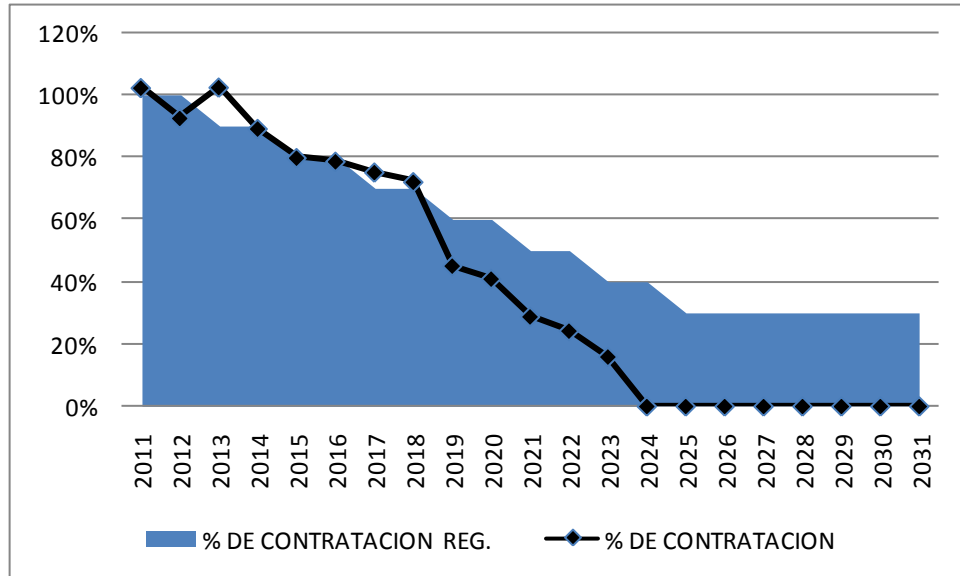
3.2.3 Nivel de Contratación Actual de ENSA

Cuadro No. 18 Niveles de Energía Asociada a Contratos Actuales vs Niveles de Contratación Regulatorio

| AÑOS | ENE | FEB | MAR | ABR | MAY | JUN | JUL | AGO | SEP | OCT | NOV | DIC | % MAX | % REG |
|------|--------|--------|-------|-------|-------|-------|--------|-------|-------|--------|--------|-------|--------|-------|
| 2011 | 102.5% | 97.5% | 97.9% | 92.2% | 97.8% | 98.4% | 100.5% | 98.8% | 97.4% | 101.5% | 102.6% | 97.9% | 102.6% | 100% |
| 2012 | 91.3% | 92.8% | 87.8% | 83.3% | 84.0% | 86.5% | 85.5% | 84.1% | 83.8% | 84.5% | 86.3% | 83.4% | 92.8% | 100% |
| 2013 | 102.8% | 101.3% | 98.7% | 94.5% | 95.3% | 98.2% | 97.1% | 95.5% | 95.1% | 95.9% | 89.3% | 85.9% | 102.8% | 90% |
| 2014 | 89.4% | 88.0% | 85.6% | 81.6% | 82.3% | 85.1% | 77.7% | 76.2% | 76.0% | 76.6% | 78.5% | 75.5% | 89.4% | 90% |
| 2015 | 80.0% | 78.8% | 76.6% | 71.8% | 72.5% | 74.9% | 74.0% | 72.6% | 72.3% | 73.0% | 74.8% | 71.9% | 80.0% | 80% |
| 2016 | 77.4% | 78.9% | 74.1% | 69.5% | 70.1% | 72.4% | 71.6% | 70.2% | 70.0% | 70.6% | 72.3% | 69.6% | 78.9% | 80% |
| 2017 | 75.4% | 74.2% | 72.2% | 67.7% | 68.3% | 70.5% | 69.7% | 68.4% | 68.1% | 68.7% | 70.4% | 67.8% | 75.4% | 70% |
| 2018 | 72.3% | 71.1% | 69.2% | 64.8% | 65.4% | 67.6% | 66.8% | 65.5% | 65.3% | 65.9% | 67.5% | 64.9% | 72.3% | 70% |
| 2019 | 45.3% | 44.5% | 43.3% | 40.6% | 40.9% | 42.3% | 41.8% | 41.0% | 40.9% | 41.2% | 42.3% | 40.7% | 45.3% | 60% |
| 2020 | 40.3% | 41.1% | 38.6% | 36.2% | 36.5% | 37.7% | 37.3% | 36.6% | 36.4% | 36.7% | 37.7% | 36.2% | 41.1% | 60% |
| 2021 | 28.9% | 28.4% | 27.6% | 25.9% | 26.2% | 27.0% | 26.7% | 26.2% | 26.1% | 26.3% | 27.0% | 26.0% | 28.9% | 50% |
| 2022 | 24.3% | 23.9% | 23.3% | 21.8% | 22.0% | 22.7% | 22.5% | 22.0% | 22.0% | 22.2% | 22.7% | 21.9% | 24.3% | 50% |
| 2023 | 15.6% | 15.9% | 15.0% | 14.0% | 14.2% | 14.6% | 14.5% | 14.2% | 14.1% | 14.3% | 14.6% | 14.1% | 15.9% | 40% |
| 2024 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 40% |
| 2025 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 30% |
| 2026 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 30% |
| 2027 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 30% |
| 2028 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 30% |
| 2029 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 30% |
| 2030 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 30% |
| 2031 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 30% |

En la grafica No 6, se muestra el Porcentaje de Contratación actual de energía vs el porcentaje de contratación regulatorio.

Grafico No. 6 Nivel de Contratación de Energía (%) 2011-2031



4 Requerimientos de Potencia y Energía

Los requerimientos de contratación tanto de potencia como de energía, se determinan de acuerdo a lo establecido en la “Metodología para el Cálculo de los Requerimientos de Potencia y Energía por Contratar para las Empresas Distribuidoras”, aprobado mediante la resolución AN No 3885-Elec del 8 de octubre de 2010.

4.1 Requerimientos de Potencia de EDEMET

Cuadro No. 19 Requerimientos de Potencia Firme (MW)

| AÑOS | ENE | FEB | MAR | ABR | MAY | JUN | JUL | AGO | SEP | OCT | NOV | DIC |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 2011 | 139.93 | 131.78 | 183.61 | 199.13 | 208.70 | 164.66 | 110.89 | 158.78 | 166.42 | 169.21 | 144.83 | 172.00 |
| 2012 | 65.61 | 65.87 | 105.92 | 145.42 | 145.28 | 102.54 | 111.78 | 105.41 | 125.47 | 108.53 | 77.49 | 117.08 |
| 2013 | 7.09 | 16.18 | 55.95 | 82.90 | 83.95 | 45.09 | 39.55 | 31.71 | 54.35 | 39.55 | 80.11 | 109.72 |
| 2014 | 51.88 | 60.40 | 103.77 | 131.96 | 130.22 | 95.16 | 186.18 | 168.70 | 193.61 | 188.62 | 153.85 | 184.34 |
| 2015 | 255.28 | 262.46 | 313.60 | 356.26 | 356.72 | 316.38 | 304.70 | 283.56 | 311.53 | 306.28 | 268.41 | 301.98 |
| 2016 | 286.01 | 278.51 | 349.63 | 393.20 | 393.67 | 351.25 | 340.39 | 314.41 | 346.36 | 339.97 | 299.81 | 334.59 |
| 2017 | 321.97 | 311.97 | 391.20 | 435.76 | 436.00 | 389.67 | 379.58 | 350.28 | 384.50 | 378.79 | 338.51 | 373.91 |
| 2018 | 357.22 | 348.84 | 431.25 | 478.02 | 477.76 | 427.80 | 418.75 | 387.92 | 423.30 | 415.05 | 374.09 | 412.79 |
| 2019 | 591.24 | 581.63 | 669.46 | 717.95 | 717.03 | 663.96 | 655.82 | 623.01 | 659.60 | 651.16 | 609.03 | 647.98 |
| 2020 | 623.35 | 596.15 | 706.90 | 756.55 | 756.46 | 698.45 | 691.58 | 655.07 | 694.91 | 686.20 | 642.75 | 681.90 |
| 2021 | 681.73 | 670.39 | 767.88 | 820.28 | 817.29 | 762.22 | 752.65 | 711.66 | 754.63 | 745.64 | 700.42 | 744.09 |
| 2022 | 801.79 | 804.51 | 890.92 | 945.59 | 942.83 | 884.89 | 874.83 | 833.39 | 875.98 | 866.72 | 819.74 | 864.60 |
| 2023 | 1035.22 | 1039.15 | 1127.33 | 1184.73 | 1180.52 | 1121.46 | 1113.56 | 1065.80 | 1110.84 | 1101.29 | 1052.42 | 1099.51 |
| 2024 | 1083.21 | 1056.50 | 1178.40 | 1238.61 | 1233.66 | 1170.42 | 1166.64 | 1113.77 | 1160.30 | 1150.43 | 1099.60 | 1149.01 |
| 2025 | 1136.09 | 1127.09 | 1233.55 | 1296.80 | 1290.42 | 1227.95 | 1222.21 | 1163.55 | 1214.16 | 1203.50 | 1152.91 | 1204.67 |
| 2026 | 1189.51 | 1188.02 | 1290.41 | 1356.77 | 1348.96 | 1284.95 | 1278.36 | 1216.96 | 1269.21 | 1258.21 | 1203.08 | 1257.57 |
| 2027 | 1245.62 | 1245.56 | 1350.14 | 1419.78 | 1410.52 | 1344.82 | 1337.35 | 1273.06 | 1327.03 | 1315.68 | 1258.26 | 1315.45 |
| 2028 | 1301.21 | 1275.67 | 1410.91 | 1484.55 | 1473.17 | 1406.37 | 1398.87 | 1329.83 | 1386.48 | 1374.75 | 1315.44 | 1375.84 |
| 2029 | 1370.09 | 1360.46 | 1478.36 | 1554.33 | 1543.71 | 1474.19 | 1464.82 | 1394.28 | 1451.99 | 1439.85 | 1377.48 | 1440.53 |
| 2030 | 1431.33 | 1435.99 | 1546.94 | 1626.67 | 1614.55 | 1542.94 | 1532.56 | 1458.69 | 1518.39 | 1505.84 | 1440.84 | 1507.00 |
| 2031 | 1499.30 | 1505.71 | 1619.31 | 1703.01 | 1689.37 | 1615.49 | 1604.03 | 1526.67 | 1588.45 | 1575.47 | 1507.69 | 1577.14 |

4.2 Requerimientos de Potencia de EDECHI

Cuadro No. 20 Requerimientos de Potencia Firme (MW)

| AÑOS | ENE | FEB | MAR | ABR | MAY | JUN | JUL | AGO | SEP | OCT | NOV | DIC |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 2011 | 6.87 | 8.69 | 13.99 | 15.97 | 9.88 | 4.04 | 8.64 | 5.04 | 3.92 | 0.00 | 2.65 | 6.06 |
| 2012 | 2.31 | 3.40 | 3.74 | 3.80 | 1.88 | 1.03 | 2.95 | 4.24 | 3.23 | 2.74 | 1.95 | 0.75 |
| 2013 | 3.73 | 1.23 | 9.90 | 13.87 | 11.70 | 10.91 | 11.17 | 7.12 | 6.39 | 7.51 | 10.19 | 14.02 |
| 2014 | 12.14 | 10.43 | 18.03 | 21.92 | 14.61 | 9.05 | 19.20 | 14.65 | 13.57 | 4.81 | 12.86 | 16.73 |
| 2015 | 39.50 | 35.77 | 44.82 | 50.69 | 42.87 | 37.34 | 42.65 | 37.52 | 36.17 | 27.23 | 35.42 | 39.88 |
| 2016 | 43.04 | 35.79 | 48.57 | 55.18 | 46.90 | 41.30 | 46.84 | 41.11 | 39.72 | 30.36 | 38.93 | 43.60 |
| 2017 | 47.51 | 39.54 | 53.29 | 60.08 | 51.11 | 45.59 | 51.37 | 45.00 | 43.77 | 33.75 | 42.93 | 47.82 |
| 2018 | 51.71 | 43.43 | 57.82 | 64.46 | 55.63 | 49.63 | 55.63 | 48.85 | 47.57 | 37.20 | 46.68 | 51.79 |
| 2019 | 85.34 | 77.20 | 92.13 | 98.58 | 89.58 | 83.11 | 89.34 | 81.77 | 80.66 | 70.03 | 79.94 | 85.02 |
| 2020 | 89.18 | 77.98 | 96.77 | 103.25 | 94.01 | 86.86 | 93.24 | 85.53 | 84.17 | 73.44 | 83.62 | 88.69 |
| 2021 | 128.81 | 121.77 | 136.87 | 143.54 | 134.00 | 126.31 | 132.77 | 124.78 | 123.36 | 112.07 | 122.76 | 128.06 |
| 2022 | 133.84 | 126.73 | 141.45 | 148.56 | 138.81 | 131.13 | 137.86 | 129.38 | 127.91 | 116.10 | 126.83 | 132.81 |
| 2023 | 138.98 | 132.22 | 145.96 | 154.01 | 143.54 | 136.06 | 143.07 | 134.09 | 132.57 | 120.51 | 131.43 | 137.66 |
| 2024 | 144.23 | 133.67 | 151.35 | 159.59 | 148.59 | 141.09 | 148.38 | 138.90 | 137.31 | 124.82 | 136.12 | 142.61 |
| 2025 | 149.92 | 143.03 | 156.85 | 165.66 | 153.71 | 146.35 | 154.14 | 144.11 | 142.46 | 129.49 | 141.20 | 147.98 |
| 2026 | 155.66 | 148.94 | 162.60 | 172.02 | 159.09 | 151.87 | 159.96 | 149.37 | 147.66 | 134.21 | 146.34 | 153.40 |
| 2027 | 161.69 | 155.12 | 168.28 | 178.48 | 164.77 | 157.64 | 166.05 | 154.89 | 153.11 | 139.16 | 151.72 | 159.09 |
| 2028 | 167.88 | 155.91 | 174.33 | 185.34 | 171.03 | 163.58 | 172.32 | 160.56 | 158.70 | 144.24 | 157.25 | 164.93 |
| 2029 | 174.37 | 168.15 | 180.72 | 192.14 | 177.42 | 169.81 | 178.90 | 166.51 | 164.58 | 149.58 | 163.06 | 171.06 |
| 2030 | 181.15 | 175.12 | 187.22 | 199.25 | 183.91 | 176.31 | 185.76 | 172.72 | 170.72 | 155.15 | 169.12 | 177.46 |
| 2031 | 188.17 | 182.38 | 194.18 | 206.85 | 190.86 | 183.04 | 192.87 | 179.14 | 177.06 | 160.91 | 175.39 | 184.08 |

4.3 Requerimientos de Potencia de ENSA

Cuadro No. 21 Requerimientos de Potencia Firme (MW)

| AÑOS | ENE | FEB | MAR | ABR | MAY | JUN | JUL | AGO | SEP | OCT | NOV | DIC |
|------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 2011 | 0.00 | 8.02 | 3.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2012 | 23.85 | 21.88 | 55.30 | 85.66 | 71.00 | 58.87 | 65.11 | 69.96 | 71.95 | 69.26 | 64.69 | 80.24 |
| 2013 | 5.75 | 13.95 | 28.54 | 54.77 | 39.87 | 21.85 | 28.41 | 33.77 | 35.87 | 30.93 | 61.43 | 82.90 |
| 2014 | 28.16 | 36.69 | 52.09 | 79.67 | 74.52 | 55.58 | 101.28 | 112.18 | 114.38 | 109.19 | 95.30 | 117.74 |
| 2015 | 136.75 | 145.64 | 161.47 | 200.08 | 194.68 | 174.79 | 182.03 | 193.47 | 195.78 | 190.33 | 175.75 | 199.24 |
| 2016 | 155.73 | 144.98 | 181.30 | 221.24 | 215.65 | 195.08 | 202.57 | 214.40 | 216.78 | 211.16 | 196.07 | 220.30 |
| 2017 | 171.06 | 180.50 | 197.31 | 238.32 | 232.58 | 211.46 | 219.15 | 231.30 | 233.75 | 227.97 | 212.48 | 237.32 |
| 2018 | 190.90 | 200.60 | 218.05 | 260.45 | 254.51 | 232.68 | 240.63 | 253.18 | 255.72 | 249.74 | 233.73 | 259.35 |
| 2019 | 362.33 | 372.50 | 390.60 | 434.74 | 428.56 | 405.82 | 414.10 | 427.18 | 429.82 | 423.59 | 406.92 | 433.52 |
| 2020 | 406.91 | 394.57 | 436.28 | 481.50 | 475.08 | 451.48 | 460.08 | 473.65 | 476.39 | 469.93 | 452.62 | 480.16 |
| 2021 | 503.48 | 514.64 | 534.49 | 582.22 | 575.45 | 550.54 | 559.61 | 573.94 | 576.83 | 570.01 | 551.73 | 580.71 |
| 2022 | 555.84 | 567.48 | 588.17 | 637.93 | 630.87 | 604.90 | 614.36 | 629.29 | 632.31 | 625.20 | 606.15 | 636.27 |
| 2023 | 628.34 | 614.38 | 661.41 | 712.32 | 705.09 | 678.53 | 688.20 | 703.48 | 706.56 | 699.29 | 679.81 | 710.59 |
| 2024 | 757.96 | 743.59 | 792.00 | 844.40 | 836.96 | 809.62 | 819.58 | 835.30 | 838.48 | 830.99 | 810.93 | 842.56 |
| 2025 | 780.90 | 793.53 | 815.97 | 869.95 | 862.29 | 834.12 | 844.38 | 860.58 | 863.85 | 856.14 | 835.47 | 868.00 |
| 2026 | 813.25 | 826.40 | 849.77 | 905.98 | 898.00 | 868.67 | 879.35 | 896.22 | 899.63 | 891.60 | 870.08 | 903.88 |
| 2027 | 849.23 | 862.97 | 887.38 | 946.06 | 937.74 | 907.11 | 918.26 | 935.88 | 939.43 | 931.05 | 908.58 | 943.80 |
| 2028 | 895.39 | 878.44 | 935.61 | 997.48 | 988.70 | 956.41 | 968.17 | 986.74 | 990.48 | 981.65 | 957.96 | 994.99 |
| 2029 | 933.99 | 949.10 | 975.94 | 1040.47 | 1031.31 | 997.63 | 1009.90 | 1029.26 | 1033.17 | 1023.95 | 999.25 | 1037.80 |
| 2030 | 957.50 | 972.99 | 1000.50 | 1066.65 | 1057.26 | 1022.74 | 1035.31 | 1055.16 | 1059.17 | 1049.72 | 1024.40 | 1063.87 |
| 2031 | 985.34 | 1001.28 | 1029.59 | 1097.66 | 1088.00 | 1052.47 | 1065.41 | 1085.84 | 1089.97 | 1080.24 | 1054.18 | 1094.75 |

4.4 Requerimientos de Energía de EDEMET

Cuadro No. 22 Requerimientos de Energía (GWh)

| AÑOS | ENE | FEB | MAR | ABR | MAY | JUN | JUL | AGO | SEP | OCT | NOV | DIC |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 2011 | 69.20 | 66.18 | 82.20 | 81.87 | 84.63 | 74.00 | 72.70 | 69.45 | 73.32 | 73.11 | 62.01 | 74.06 |
| 2012 | 64.32 | 58.06 | 76.68 | 82.36 | 86.74 | 70.62 | 78.91 | 75.12 | 78.84 | 74.37 | 62.31 | 80.03 |
| 2013 | 26.89 | 27.02 | 45.07 | 50.93 | 54.12 | 38.78 | 38.57 | 35.57 | 42.22 | 36.90 | 53.10 | 68.30 |
| 2014 | 27.21 | 27.08 | 46.11 | 52.13 | 53.72 | 40.60 | 87.72 | 79.69 | 86.00 | 86.96 | 71.32 | 86.75 |
| 2015 | 121.39 | 111.44 | 144.87 | 146.55 | 152.84 | 135.58 | 134.52 | 124.03 | 130.42 | 132.63 | 113.51 | 133.06 |
| 2016 | 135.90 | 124.03 | 161.88 | 162.59 | 169.56 | 151.00 | 150.52 | 137.88 | 145.40 | 147.66 | 126.84 | 147.91 |
| 2017 | 152.82 | 134.09 | 181.53 | 181.09 | 188.75 | 168.18 | 168.30 | 153.94 | 162.01 | 164.99 | 143.04 | 165.64 |
| 2018 | 169.40 | 149.50 | 200.55 | 199.42 | 207.67 | 185.18 | 186.00 | 170.54 | 178.77 | 181.34 | 158.15 | 183.14 |
| 2019 | 266.98 | 235.98 | 309.21 | 303.66 | 315.95 | 284.94 | 287.52 | 265.85 | 275.57 | 280.27 | 247.85 | 282.88 |
| 2020 | 283.53 | 252.13 | 328.83 | 322.51 | 335.96 | 302.12 | 305.63 | 281.77 | 292.64 | 297.72 | 263.71 | 300.06 |
| 2021 | 311.39 | 275.15 | 358.45 | 350.81 | 364.12 | 330.92 | 333.83 | 307.28 | 318.93 | 324.69 | 288.52 | 328.67 |
| 2022 | 370.11 | 333.88 | 419.70 | 407.84 | 423.64 | 387.73 | 391.67 | 363.46 | 373.68 | 380.99 | 341.12 | 385.52 |
| 2023 | 485.45 | 438.08 | 538.65 | 517.85 | 537.58 | 498.45 | 505.81 | 471.92 | 480.74 | 491.21 | 444.74 | 497.48 |
| 2024 | 507.97 | 461.35 | 563.07 | 541.42 | 561.80 | 520.22 | 529.94 | 493.17 | 502.15 | 513.14 | 464.69 | 519.89 |
| 2025 | 532.79 | 475.17 | 589.44 | 566.87 | 587.67 | 545.82 | 555.20 | 515.23 | 525.48 | 536.83 | 487.24 | 545.10 |
| 2026 | 557.87 | 500.89 | 616.62 | 593.11 | 614.35 | 571.17 | 580.73 | 538.90 | 549.32 | 561.25 | 508.46 | 569.05 |
| 2027 | 584.21 | 525.18 | 645.18 | 620.68 | 642.40 | 597.80 | 607.54 | 563.76 | 574.37 | 586.90 | 531.80 | 595.27 |
| 2028 | 610.29 | 557.15 | 674.24 | 649.01 | 670.95 | 625.18 | 635.51 | 588.92 | 600.11 | 613.28 | 555.99 | 622.61 |
| 2029 | 642.64 | 573.66 | 706.50 | 679.55 | 703.11 | 655.36 | 665.49 | 617.49 | 628.49 | 642.35 | 582.23 | 651.91 |
| 2030 | 671.39 | 605.55 | 739.30 | 711.20 | 735.40 | 685.95 | 696.29 | 646.04 | 657.25 | 671.81 | 609.03 | 682.02 |
| 2031 | 703.30 | 634.99 | 773.91 | 744.61 | 769.51 | 718.22 | 728.79 | 676.17 | 687.61 | 702.90 | 637.32 | 713.78 |

4.5 Requerimientos de Energía de EDECHI

Cuadro No. 23 Requerimientos de Energía (GWh)

| AÑOS | ENE | FEB | MAR | ABR | MAY | JUN | JUL | AGO | SEP | OCT | NOV | DIC |
|------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 2011 | 5.05 | 5.21 | 7.16 | 7.24 | 5.45 | 4.15 | 5.04 | 3.95 | 3.66 | 1.77 | 3.55 | 4.58 |
| 2012 | 3.31 | 4.14 | 2.35 | 0.92 | 1.29 | 2.68 | 0.67 | 1.98 | 1.68 | 3.33 | 1.24 | 0.00 |
| 2013 | 0.19 | 0.00 | 2.84 | 4.23 | 4.08 | 4.43 | 3.71 | 2.07 | 1.80 | 3.76 | 3.82 | 5.63 |
| 2014 | 10.11 | 8.73 | 12.50 | 12.99 | 10.83 | 8.99 | 12.84 | 11.11 | 10.88 | 8.71 | 10.44 | 12.45 |
| 2015 | 20.49 | 17.57 | 22.87 | 22.99 | 21.02 | 19.39 | 20.15 | 18.11 | 17.88 | 16.42 | 17.30 | 19.93 |
| 2016 | 22.37 | 18.68 | 24.89 | 25.13 | 23.03 | 21.39 | 22.15 | 19.84 | 19.62 | 18.15 | 18.98 | 21.82 |
| 2017 | 24.65 | 19.84 | 27.34 | 27.46 | 25.15 | 23.56 | 24.31 | 21.72 | 21.57 | 20.01 | 20.88 | 23.93 |
| 2018 | 26.78 | 21.66 | 29.66 | 29.55 | 27.34 | 25.58 | 26.32 | 23.53 | 23.39 | 21.85 | 22.65 | 25.90 |
| 2019 | 42.39 | 35.22 | 46.58 | 45.65 | 43.00 | 40.66 | 41.28 | 37.22 | 37.21 | 35.89 | 36.20 | 40.79 |
| 2020 | 44.75 | 37.19 | 49.45 | 48.36 | 45.65 | 42.97 | 43.57 | 39.37 | 39.26 | 38.06 | 38.29 | 43.03 |
| 2021 | 66.04 | 57.82 | 71.68 | 68.80 | 66.73 | 61.42 | 63.64 | 59.06 | 59.19 | 59.99 | 57.84 | 63.82 |
| 2022 | 68.99 | 60.17 | 74.08 | 71.21 | 69.13 | 66.68 | 66.09 | 61.24 | 61.38 | 62.16 | 59.76 | 66.19 |
| 2023 | 71.64 | 62.79 | 76.45 | 73.83 | 71.50 | 69.20 | 68.59 | 63.48 | 63.62 | 64.53 | 61.93 | 68.61 |
| 2024 | 74.36 | 65.75 | 79.28 | 76.51 | 74.01 | 71.76 | 71.15 | 65.76 | 65.90 | 66.84 | 64.15 | 71.09 |
| 2025 | 77.29 | 67.94 | 82.17 | 79.43 | 76.57 | 74.44 | 73.91 | 68.23 | 68.38 | 69.35 | 66.55 | 73.77 |
| 2026 | 80.26 | 70.75 | 85.19 | 82.49 | 79.26 | 77.25 | 76.71 | 70.73 | 70.88 | 71.89 | 68.98 | 76.48 |
| 2027 | 83.38 | 73.69 | 88.17 | 85.59 | 82.09 | 80.20 | 79.64 | 73.35 | 73.50 | 74.54 | 71.52 | 79.32 |
| 2028 | 86.58 | 76.72 | 91.34 | 88.89 | 85.22 | 83.22 | 82.65 | 76.04 | 76.20 | 77.27 | 74.13 | 82.24 |
| 2029 | 89.93 | 79.90 | 94.70 | 92.16 | 88.41 | 86.40 | 85.82 | 78.87 | 79.03 | 80.14 | 76.88 | 85.31 |
| 2030 | 93.44 | 83.21 | 98.11 | 95.58 | 91.65 | 89.72 | 89.12 | 81.82 | 81.98 | 83.13 | 79.74 | 88.51 |
| 2031 | 97.06 | 86.68 | 101.77 | 99.23 | 95.12 | 93.15 | 92.53 | 84.87 | 85.03 | 86.22 | 82.71 | 91.82 |

4.6 Requerimientos de Energía de ENSA

Cuadro No. 24 Requerimientos de Energía (GWh)

| AÑOS | ENE | FEB | MAR | ABR | MAY | JUN | JUL | AGO | SEP | OCT | NOV | DIC |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 2011 | 0.00 | 5.20 | 5.19 | 18.59 | 5.47 | 3.65 | 0.00 | 2.81 | 6.22 | 0.00 | 0.00 | 5.12 |
| 2012 | 4.86 | 4.26 | 20.36 | 32.08 | 25.68 | 20.40 | 23.39 | 24.58 | 25.35 | 25.28 | 22.36 | 30.53 |
| 2013 | 0.00 | 0.00 | 3.41 | 14.67 | 7.59 | 0.00 | 2.43 | 4.34 | 5.24 | 3.20 | 16.82 | 28.73 |
| 2014 | 20.47 | 22.38 | 32.88 | 44.17 | 42.94 | 33.11 | 57.38 | 61.36 | 62.19 | 61.99 | 51.53 | 66.43 |
| 2015 | 56.14 | 54.77 | 69.41 | 82.60 | 82.40 | 71.63 | 75.96 | 79.73 | 80.54 | 80.94 | 69.01 | 85.58 |
| 2016 | 65.78 | 56.42 | 79.59 | 92.66 | 92.66 | 81.42 | 85.98 | 89.72 | 90.53 | 91.22 | 78.39 | 96.02 |
| 2017 | 73.57 | 70.77 | 87.82 | 100.78 | 100.95 | 89.32 | 94.07 | 97.78 | 98.59 | 99.51 | 85.97 | 104.45 |
| 2018 | 85.67 | 81.85 | 100.60 | 113.41 | 113.84 | 101.61 | 106.64 | 110.31 | 111.13 | 112.41 | 97.74 | 117.56 |
| 2019 | 176.16 | 163.78 | 192.62 | 199.44 | 202.29 | 188.35 | 194.51 | 196.49 | 197.05 | 201.49 | 180.79 | 207.12 |
| 2020 | 200.78 | 181.86 | 218.16 | 223.91 | 227.35 | 212.56 | 219.17 | 220.89 | 221.41 | 226.65 | 203.99 | 232.57 |
| 2021 | 252.55 | 233.26 | 271.33 | 274.40 | 279.15 | 262.97 | 270.37 | 271.33 | 271.75 | 278.73 | 252.27 | 285.10 |
| 2022 | 280.31 | 258.55 | 300.07 | 302.00 | 307.43 | 290.32 | 298.22 | 298.86 | 299.24 | 307.13 | 278.47 | 313.82 |
| 2023 | 319.54 | 292.18 | 340.10 | 339.64 | 346.10 | 328.14 | 336.57 | 336.54 | 336.81 | 346.05 | 314.69 | 353.02 |
| 2024 | 389.96 | 357.85 | 411.76 | 406.76 | 415.10 | 395.77 | 405.09 | 403.76 | 403.83 | 415.53 | 379.44 | 422.93 |
| 2025 | 401.78 | 368.70 | 424.25 | 419.09 | 427.69 | 407.77 | 417.37 | 416.00 | 416.08 | 428.13 | 390.95 | 435.76 |
| 2026 | 418.47 | 384.02 | 441.87 | 436.50 | 445.45 | 424.70 | 434.70 | 433.28 | 433.36 | 445.91 | 407.18 | 453.85 |
| 2027 | 437.04 | 401.06 | 461.48 | 455.86 | 465.22 | 443.54 | 453.99 | 452.50 | 452.58 | 465.69 | 425.25 | 473.99 |
| 2028 | 460.86 | 422.92 | 486.63 | 480.71 | 490.58 | 467.71 | 478.73 | 477.16 | 477.25 | 491.07 | 448.43 | 499.82 |
| 2029 | 480.78 | 441.20 | 507.66 | 501.48 | 511.77 | 487.91 | 499.41 | 497.78 | 497.87 | 512.29 | 467.80 | 521.42 |
| 2030 | 492.90 | 452.32 | 520.45 | 514.11 | 524.67 | 500.21 | 512.00 | 510.33 | 510.42 | 525.20 | 479.59 | 534.56 |
| 2031 | 507.26 | 465.49 | 535.61 | 529.09 | 539.96 | 514.78 | 526.91 | 525.19 | 525.29 | 540.49 | 493.56 | 550.13 |

5 Necesidades de Contratación de Potencia y Energía

Las necesidades de contratación, que servirán para determinar el programa de realización de Actos Públicos, se medirán en base a los plazos de duración de los contratos y al cumplimiento al menos con los siguientes porcentajes de contratación para la potencia y la energía, considerando una tolerancia de 5%.

Cuadro No. 25 % de Contratación Regulatorio

| Años Corrientes | % de Contratación Regulatorio | Años |
|-----------------|-------------------------------|-----------|
| 1-2 | 100% | 2011-2012 |
| 3-4 | 90% | 2013-2014 |
| 5-6 | 80% | 2015-2016 |
| 7-8 | 70% | 2017-2018 |
| 9-10 | 60% | 2019-2020 |
| 11-12 | 50% | 2021-2022 |
| 13-14 | 40% | 2023-2024 |
| 15-21 | 30% | 2024-2031 |

5.1 Necesidades de Contratación 2011-2031

Cumpliendo con los porcentajes de contratación regulatorios establecidos en las Reglas de Compra como se muestra en el cuadro No. 25, las necesidades de contratación para el periodo de 2011 a 2031 serian las siguientes.

5.1.1 Necesidades de Contratación de Potencia Firme

Cuadro No. 26 Necesidades de Contratación de EDEMET 2011-2031 (MW)

| AÑOS | ENE | FEB | MAR | ABR | MAY | JUN | JUL | AGO | SEP | OCT | NOV | DIC |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 2011 | 139.93 | 131.78 | 183.61 | 199.13 | 208.70 | 164.66 | 110.89 | 158.78 | 166.42 | 169.21 | 144.83 | 172.00 |
| 2012 | 130.61 | 140.87 | 175.92 | 210.42 | 205.28 | 172.54 | 161.78 | 155.41 | 175.47 | 168.53 | 137.49 | 167.08 |
| 2013 | 42.38 | 50.56 | 86.35 | 110.61 | 107.06 | 76.58 | 67.09 | 55.54 | 75.92 | 71.59 | 99.10 | 125.75 |
| 2014 | 91.69 | 99.36 | 138.39 | 163.76 | 162.20 | 130.64 | 221.56 | 205.83 | 228.25 | 223.76 | 192.46 | 219.91 |
| 2015 | 204.22 | 209.96 | 250.88 | 285.01 | 285.38 | 253.10 | 243.76 | 226.85 | 249.23 | 245.02 | 214.73 | 241.58 |
| 2016 | 228.81 | 222.80 | 279.71 | 314.56 | 314.94 | 281.00 | 272.31 | 251.53 | 277.09 | 271.98 | 239.85 | 267.67 |
| 2017 | 225.38 | 218.38 | 273.84 | 305.03 | 305.20 | 272.77 | 265.70 | 245.19 | 269.15 | 265.16 | 236.96 | 261.74 |
| 2018 | 250.06 | 244.19 | 301.88 | 334.61 | 334.43 | 299.46 | 293.13 | 271.55 | 296.31 | 290.53 | 261.86 | 288.95 |
| 2019 | 354.74 | 348.98 | 401.67 | 430.77 | 430.22 | 398.38 | 393.49 | 373.81 | 395.76 | 390.69 | 365.42 | 388.79 |
| 2020 | 374.01 | 357.69 | 424.14 | 453.93 | 453.87 | 419.07 | 414.95 | 393.04 | 416.94 | 411.72 | 385.65 | 409.14 |
| 2021 | 340.86 | 335.20 | 383.94 | 410.14 | 408.64 | 381.11 | 376.32 | 355.83 | 377.32 | 372.82 | 350.21 | 372.04 |
| 2022 | 400.89 | 402.26 | 445.46 | 472.80 | 471.41 | 442.44 | 437.42 | 416.70 | 437.99 | 433.36 | 409.87 | 432.30 |
| 2023 | 414.09 | 415.66 | 450.93 | 473.89 | 472.21 | 448.58 | 445.42 | 426.32 | 444.34 | 440.51 | 420.97 | 439.80 |
| 2024 | 433.28 | 422.60 | 471.36 | 495.45 | 493.46 | 468.17 | 466.65 | 445.51 | 464.12 | 460.17 | 439.84 | 459.60 |
| 2025 | 340.83 | 338.13 | 370.07 | 389.04 | 387.13 | 368.39 | 366.66 | 349.07 | 364.25 | 361.05 | 345.87 | 361.40 |
| 2026 | 356.85 | 356.40 | 387.12 | 407.03 | 404.69 | 385.48 | 383.51 | 365.09 | 380.76 | 377.46 | 360.92 | 377.27 |
| 2027 | 373.69 | 373.67 | 405.04 | 425.93 | 423.16 | 403.45 | 401.21 | 381.92 | 398.11 | 394.70 | 377.48 | 394.64 |
| 2028 | 390.36 | 382.70 | 423.27 | 445.36 | 441.95 | 421.91 | 419.66 | 398.95 | 415.94 | 412.42 | 394.63 | 412.75 |
| 2029 | 411.03 | 408.14 | 443.51 | 466.30 | 463.11 | 442.26 | 439.45 | 418.28 | 435.60 | 431.96 | 413.24 | 432.16 |
| 2030 | 429.40 | 430.80 | 464.08 | 488.00 | 484.37 | 462.88 | 459.77 | 437.61 | 455.52 | 451.75 | 432.25 | 452.10 |
| 2031 | 449.79 | 451.71 | 485.79 | 510.90 | 506.81 | 484.65 | 481.21 | 458.00 | 476.54 | 472.64 | 452.31 | 473.14 |

Cuadro No. 27 Necesidades de Contratación de EDECHI 2011-2031 (MW)

| AÑOS | ENE | FEB | MAR | ABR | MAY | JUN | JUL | AGO | SEP | OCT | NOV | DIC |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 2011 | 6.87 | 8.69 | 13.99 | 15.97 | 9.88 | 4.04 | 8.64 | 5.04 | 3.92 | 0.00 | 2.65 | 6.06 |
| 2012 | 7.31 | 5.40 | 13.74 | 18.80 | 11.88 | 6.03 | 27.95 | 24.24 | 23.23 | 14.74 | 21.95 | 25.75 |
| 2013 | 39.36 | 37.11 | 44.91 | 48.48 | 42.03 | 36.82 | 41.55 | 37.91 | 37.25 | 29.25 | 36.17 | 39.62 |
| 2014 | 24.43 | 22.89 | 29.73 | 33.23 | 26.65 | 21.65 | 26.28 | 22.19 | 21.21 | 13.33 | 20.58 | 24.05 |
| 2015 | 31.60 | 28.62 | 35.86 | 40.55 | 34.30 | 29.87 | 34.12 | 30.01 | 28.94 | 21.78 | 28.33 | 31.90 |
| 2016 | 34.43 | 28.63 | 38.85 | 44.14 | 37.52 | 33.04 | 37.47 | 32.89 | 31.78 | 24.29 | 31.14 | 34.88 |
| 2017 | 33.26 | 27.67 | 37.30 | 42.05 | 35.77 | 31.92 | 35.96 | 31.50 | 30.64 | 23.63 | 30.05 | 33.48 |
| 2018 | 36.20 | 30.40 | 40.47 | 45.12 | 38.94 | 34.74 | 38.94 | 34.19 | 33.30 | 26.04 | 32.68 | 36.25 |
| 2019 | 51.21 | 46.32 | 55.28 | 59.15 | 53.75 | 49.87 | 53.61 | 49.06 | 48.39 | 42.02 | 47.97 | 51.01 |
| 2020 | 53.51 | 46.79 | 58.06 | 61.95 | 56.41 | 52.12 | 55.94 | 51.32 | 50.50 | 44.07 | 50.17 | 53.21 |
| 2021 | 64.41 | 60.89 | 68.43 | 71.77 | 67.00 | 63.15 | 66.38 | 62.39 | 61.68 | 56.03 | 61.38 | 64.03 |
| 2022 | 66.92 | 63.36 | 70.72 | 74.28 | 69.40 | 65.56 | 68.93 | 64.69 | 63.96 | 58.05 | 63.42 | 66.40 |
| 2023 | 55.59 | 52.89 | 58.39 | 61.61 | 57.42 | 54.43 | 57.23 | 53.64 | 53.03 | 48.21 | 52.57 | 55.06 |
| 2024 | 57.69 | 53.47 | 60.54 | 63.83 | 59.43 | 56.44 | 59.35 | 55.56 | 54.92 | 49.93 | 54.45 | 57.04 |
| 2025 | 44.97 | 42.91 | 47.06 | 49.70 | 46.11 | 43.91 | 46.24 | 43.23 | 42.74 | 38.85 | 42.36 | 44.39 |
| 2026 | 46.70 | 44.68 | 48.78 | 51.61 | 47.73 | 45.56 | 47.99 | 44.81 | 44.30 | 40.26 | 43.90 | 46.02 |
| 2027 | 48.51 | 46.54 | 50.48 | 53.54 | 49.43 | 47.29 | 49.82 | 46.47 | 45.93 | 41.75 | 45.52 | 47.73 |
| 2028 | 50.36 | 46.77 | 52.30 | 55.60 | 51.31 | 49.07 | 51.70 | 48.17 | 47.61 | 43.27 | 47.18 | 49.48 |
| 2029 | 52.31 | 50.45 | 54.22 | 57.64 | 53.23 | 50.94 | 53.67 | 49.95 | 49.38 | 44.88 | 48.92 | 51.32 |
| 2030 | 54.35 | 52.53 | 56.17 | 59.78 | 55.17 | 52.89 | 55.73 | 51.82 | 51.21 | 46.55 | 50.74 | 53.24 |
| 2031 | 56.45 | 54.72 | 58.25 | 62.05 | 57.26 | 54.91 | 57.86 | 53.74 | 53.12 | 48.27 | 52.62 | 55.22 |

Cuadro No. 28 Necesidades de Contratación de ENSA 2011-2031 (MW)

| AÑOS | ENE | FEB | MAR | ABR | MAY | JUN | JUL | AGO | SEP | OCT | NOV | DIC |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 2011 | 0.00 | 8.02 | 3.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2012 | 53.85 | 44.88 | 75.30 | 105.66 | 101.00 | 83.87 | 90.11 | 99.96 | 101.95 | 97.26 | 84.69 | 105.24 |
| 2013 | 5.18 | 12.55 | 25.69 | 49.29 | 44.88 | 28.66 | 34.57 | 43.90 | 45.78 | 41.34 | 73.29 | 92.61 |
| 2014 | 38.84 | 46.52 | 60.38 | 85.20 | 80.57 | 63.52 | 100.16 | 109.96 | 111.94 | 107.27 | 94.77 | 114.96 |
| 2015 | 109.40 | 116.51 | 129.18 | 160.07 | 155.74 | 139.83 | 145.63 | 154.78 | 156.62 | 152.27 | 140.60 | 159.39 |
| 2016 | 124.58 | 115.98 | 145.04 | 176.99 | 172.52 | 156.06 | 162.06 | 171.52 | 173.43 | 168.92 | 156.85 | 176.24 |
| 2017 | 119.74 | 126.35 | 138.12 | 166.83 | 162.81 | 148.02 | 153.41 | 161.91 | 163.62 | 159.58 | 148.73 | 166.12 |
| 2018 | 133.63 | 140.42 | 152.63 | 182.31 | 178.16 | 162.87 | 168.44 | 177.23 | 179.00 | 174.82 | 163.61 | 181.54 |
| 2019 | 217.40 | 223.50 | 234.36 | 260.84 | 257.13 | 243.49 | 248.46 | 256.31 | 257.89 | 254.16 | 244.15 | 260.11 |
| 2020 | 244.15 | 236.74 | 261.77 | 288.90 | 285.05 | 270.89 | 276.05 | 284.19 | 285.83 | 281.96 | 271.57 | 288.09 |
| 2021 | 251.74 | 257.32 | 267.24 | 291.11 | 287.72 | 275.27 | 279.80 | 286.97 | 288.41 | 285.00 | 275.87 | 290.35 |
| 2022 | 277.92 | 283.74 | 294.08 | 318.96 | 315.43 | 302.45 | 307.18 | 314.65 | 316.15 | 312.60 | 303.07 | 318.14 |
| 2023 | 251.34 | 245.75 | 264.57 | 284.93 | 282.04 | 271.41 | 275.28 | 281.39 | 282.63 | 279.72 | 271.92 | 284.23 |
| 2024 | 303.18 | 297.44 | 316.80 | 337.76 | 334.78 | 323.85 | 327.83 | 334.12 | 335.39 | 332.40 | 324.37 | 337.02 |
| 2025 | 234.27 | 238.06 | 244.79 | 260.98 | 258.69 | 250.24 | 253.31 | 258.17 | 259.15 | 256.84 | 250.64 | 260.40 |
| 2026 | 243.97 | 247.92 | 254.93 | 271.79 | 269.40 | 260.60 | 263.81 | 268.87 | 269.89 | 267.48 | 261.02 | 271.16 |
| 2027 | 254.77 | 258.89 | 266.21 | 283.82 | 281.32 | 272.13 | 275.48 | 280.76 | 281.83 | 279.31 | 272.57 | 283.14 |
| 2028 | 268.62 | 263.53 | 280.68 | 299.24 | 296.61 | 286.92 | 290.45 | 296.02 | 297.15 | 294.49 | 287.39 | 298.50 |
| 2029 | 280.20 | 284.73 | 292.78 | 312.14 | 309.39 | 299.29 | 302.97 | 308.78 | 309.95 | 307.19 | 299.77 | 311.34 |
| 2030 | 287.25 | 291.90 | 300.15 | 319.99 | 317.18 | 306.82 | 310.59 | 316.55 | 317.75 | 314.92 | 307.32 | 319.16 |
| 2031 | 295.60 | 300.38 | 308.88 | 329.30 | 326.40 | 315.74 | 319.62 | 325.75 | 326.99 | 324.07 | 316.25 | 328.42 |

5.1.2 Necesidades de Contratación de Energía.

Cuadro No. 29 Necesidades de Contratación de EDEMET 2011-2031 (GWh)

| AÑOS | ENE | FEB | MAR | ABR | MAY | JUN | JUL | AGO | SEP | OCT | NOV | DIC |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 2011 | 69.20 | 66.18 | 82.20 | 81.87 | 84.63 | 74.00 | 72.70 | 69.45 | 73.32 | 73.11 | 62.01 | 74.06 |
| 2012 | 96.56 | 92.70 | 112.05 | 112.55 | 115.78 | 103.69 | 103.05 | 98.65 | 101.84 | 102.81 | 89.25 | 104.08 |
| 2013 | 41.97 | 40.29 | 58.67 | 62.66 | 64.05 | 52.01 | 50.01 | 44.79 | 50.49 | 50.38 | 59.99 | 74.53 |
| 2014 | 46.70 | 44.34 | 64.14 | 67.95 | 70.26 | 57.93 | 105.18 | 97.29 | 102.40 | 104.02 | 88.59 | 104.21 |
| 2015 | 97.11 | 89.15 | 115.90 | 117.24 | 122.27 | 108.46 | 107.62 | 99.23 | 104.33 | 106.10 | 90.81 | 106.45 |
| 2016 | 108.72 | 99.23 | 129.51 | 130.07 | 135.65 | 120.80 | 120.42 | 110.31 | 116.32 | 118.13 | 101.48 | 118.33 |
| 2017 | 106.97 | 93.86 | 127.07 | 126.77 | 132.13 | 117.73 | 117.81 | 107.76 | 113.41 | 115.49 | 100.13 | 115.95 |
| 2018 | 118.58 | 104.65 | 140.39 | 139.59 | 145.37 | 129.62 | 130.20 | 119.38 | 125.14 | 126.94 | 110.70 | 128.20 |
| 2019 | 160.19 | 141.59 | 185.52 | 182.20 | 189.57 | 170.96 | 172.51 | 159.51 | 165.34 | 168.16 | 148.71 | 169.73 |
| 2020 | 170.12 | 151.28 | 197.30 | 193.51 | 201.57 | 181.27 | 183.38 | 169.06 | 175.59 | 178.63 | 158.23 | 180.04 |
| 2021 | 155.69 | 137.57 | 179.23 | 175.41 | 182.06 | 165.46 | 166.92 | 153.64 | 159.47 | 162.35 | 144.26 | 164.33 |
| 2022 | 185.05 | 166.94 | 209.85 | 203.92 | 211.82 | 193.87 | 195.84 | 181.73 | 186.84 | 190.50 | 170.56 | 192.76 |
| 2023 | 194.18 | 175.23 | 215.46 | 207.14 | 215.03 | 199.38 | 202.32 | 188.77 | 192.30 | 196.48 | 177.90 | 198.99 |
| 2024 | 203.19 | 184.54 | 225.23 | 216.57 | 224.72 | 208.09 | 211.97 | 197.27 | 200.86 | 205.26 | 185.88 | 207.96 |
| 2025 | 159.84 | 142.55 | 176.83 | 170.06 | 176.30 | 163.75 | 166.56 | 154.57 | 157.64 | 161.05 | 146.17 | 163.53 |
| 2026 | 167.36 | 150.27 | 184.99 | 177.93 | 184.30 | 171.35 | 174.22 | 161.67 | 164.80 | 168.38 | 152.54 | 170.72 |
| 2027 | 175.26 | 157.55 | 193.56 | 186.20 | 192.72 | 179.34 | 182.26 | 169.13 | 172.31 | 176.07 | 159.54 | 178.58 |
| 2028 | 183.09 | 167.14 | 202.27 | 194.70 | 201.29 | 187.55 | 190.65 | 176.68 | 180.03 | 183.98 | 166.80 | 186.78 |
| 2029 | 192.79 | 172.10 | 211.95 | 203.86 | 210.93 | 196.61 | 199.65 | 185.25 | 188.55 | 192.70 | 174.67 | 195.57 |
| 2030 | 201.42 | 181.67 | 221.79 | 213.36 | 220.62 | 205.78 | 208.89 | 193.81 | 197.18 | 201.54 | 182.71 | 204.60 |
| 2031 | 210.99 | 190.50 | 232.17 | 223.38 | 230.85 | 215.47 | 218.64 | 202.85 | 206.28 | 210.87 | 191.20 | 214.14 |

Cuadro No. 30 Necesidades de Contratación de EDECHI 2011-2031 (GWh)

| AÑOS | ENE | FEB | MAR | ABR | MAY | JUN | JUL | AGO | SEP | OCT | NOV | DIC |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 2011 | 5.05 | 5.21 | 7.16 | 7.24 | 5.45 | 4.15 | 5.04 | 3.95 | 3.66 | 1.77 | 3.55 | 4.58 |
| 2012 | 6.04 | 5.18 | 7.89 | 8.56 | 6.58 | 5.38 | 13.41 | 12.04 | 11.88 | 10.15 | 11.25 | 13.19 |
| 2013 | 19.70 | 17.27 | 22.41 | 22.26 | 20.45 | 18.66 | 19.49 | 17.80 | 17.78 | 16.27 | 17.04 | 19.46 |
| 2014 | 16.43 | 14.61 | 18.69 | 18.61 | 16.94 | 15.43 | 16.17 | 14.55 | 14.41 | 12.99 | 13.93 | 16.00 |
| 2015 | 16.39 | 14.05 | 18.30 | 18.39 | 16.81 | 15.51 | 16.12 | 14.49 | 14.30 | 13.14 | 13.84 | 15.94 |
| 2016 | 17.89 | 14.94 | 19.91 | 20.10 | 18.42 | 17.11 | 17.72 | 15.87 | 15.69 | 14.52 | 15.19 | 17.45 |
| 2017 | 17.26 | 13.89 | 19.14 | 19.22 | 17.61 | 16.50 | 17.02 | 15.20 | 15.10 | 14.01 | 14.62 | 16.75 |
| 2018 | 18.74 | 15.16 | 20.76 | 20.69 | 19.14 | 17.91 | 18.42 | 16.47 | 16.37 | 15.30 | 15.85 | 18.13 |
| 2019 | 25.43 | 21.13 | 27.95 | 27.39 | 25.80 | 24.40 | 24.77 | 22.33 | 22.32 | 21.54 | 21.72 | 24.47 |
| 2020 | 26.85 | 22.31 | 29.67 | 29.02 | 27.39 | 25.78 | 26.14 | 23.62 | 23.56 | 22.84 | 22.97 | 25.82 |
| 2021 | 33.02 | 28.91 | 35.84 | 34.40 | 33.37 | 30.71 | 31.82 | 29.53 | 29.59 | 30.00 | 28.92 | 31.91 |
| 2022 | 34.49 | 30.09 | 37.04 | 35.60 | 34.57 | 33.34 | 33.04 | 30.62 | 30.69 | 31.08 | 29.88 | 33.09 |
| 2023 | 28.66 | 25.12 | 30.58 | 29.53 | 28.60 | 27.68 | 27.44 | 25.39 | 25.45 | 25.81 | 24.77 | 27.45 |
| 2024 | 29.74 | 26.30 | 31.71 | 30.60 | 29.61 | 28.70 | 28.46 | 26.30 | 26.36 | 26.74 | 25.66 | 28.44 |
| 2025 | 23.19 | 20.38 | 24.65 | 23.83 | 22.97 | 22.33 | 22.17 | 20.47 | 20.51 | 20.81 | 19.96 | 22.13 |
| 2026 | 24.08 | 21.22 | 25.56 | 24.75 | 23.78 | 23.18 | 23.01 | 21.22 | 21.26 | 21.57 | 20.69 | 22.94 |
| 2027 | 25.01 | 22.11 | 26.45 | 25.68 | 24.63 | 24.06 | 23.89 | 22.01 | 22.05 | 22.36 | 21.46 | 23.80 |
| 2028 | 25.97 | 23.02 | 27.40 | 26.67 | 25.57 | 24.97 | 24.80 | 22.81 | 22.86 | 23.18 | 22.24 | 24.67 |
| 2029 | 26.98 | 23.97 | 28.41 | 27.65 | 26.52 | 25.92 | 25.75 | 23.66 | 23.71 | 24.04 | 23.06 | 25.59 |
| 2030 | 28.03 | 24.96 | 29.43 | 28.67 | 27.50 | 26.92 | 26.73 | 24.54 | 24.59 | 24.94 | 23.92 | 26.55 |
| 2031 | 29.12 | 26.00 | 30.53 | 29.77 | 28.54 | 27.94 | 27.76 | 25.46 | 25.51 | 25.87 | 24.81 | 27.55 |

Cuadro No. 31 Necesidades de Contratación de ENSA 2011-2031 (GWh)

| AÑOS | ENE | FEB | MAR | ABR | MAY | JUN | JUL | AGO | SEP | OCT | NOV | DIC |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 2011 | 0.00 | 5.20 | 5.19 | 18.59 | 5.47 | 3.65 | 0.00 | 2.81 | 6.22 | 0.00 | 0.00 | 5.12 |
| 2012 | 21.18 | 15.96 | 31.36 | 42.31 | 41.49 | 33.39 | 36.52 | 39.99 | 40.70 | 40.16 | 32.30 | 43.84 |
| 2013 | 0.00 | 0.00 | 3.07 | 13.20 | 11.61 | 4.25 | 6.94 | 10.88 | 11.66 | 10.10 | 24.14 | 35.51 |
| 2014 | 25.73 | 26.74 | 36.98 | 46.71 | 45.80 | 36.85 | 56.40 | 59.87 | 60.60 | 60.60 | 50.88 | 64.61 |
| 2015 | 44.91 | 43.82 | 55.53 | 66.08 | 65.92 | 57.31 | 60.77 | 63.79 | 64.43 | 64.75 | 55.20 | 68.47 |
| 2016 | 52.62 | 45.13 | 63.68 | 74.13 | 74.13 | 65.14 | 68.78 | 71.77 | 72.42 | 72.97 | 62.71 | 76.82 |
| 2017 | 51.50 | 49.54 | 61.47 | 70.55 | 70.67 | 62.53 | 65.85 | 68.45 | 69.01 | 69.66 | 60.18 | 73.12 |
| 2018 | 59.97 | 57.30 | 70.42 | 79.38 | 79.68 | 71.12 | 74.65 | 77.22 | 77.79 | 78.69 | 68.42 | 82.29 |
| 2019 | 105.70 | 98.27 | 115.57 | 119.66 | 121.37 | 113.01 | 116.71 | 117.90 | 118.23 | 120.90 | 108.48 | 124.27 |
| 2020 | 120.47 | 109.12 | 130.90 | 134.35 | 136.41 | 127.54 | 131.50 | 132.53 | 132.85 | 135.99 | 122.39 | 139.54 |
| 2021 | 126.28 | 116.63 | 135.67 | 137.20 | 139.57 | 131.48 | 135.19 | 135.67 | 135.87 | 139.37 | 126.13 | 142.55 |
| 2022 | 140.15 | 129.27 | 150.03 | 151.00 | 153.71 | 145.16 | 149.11 | 149.43 | 149.62 | 153.56 | 139.24 | 156.91 |
| 2023 | 127.82 | 116.87 | 136.04 | 135.86 | 138.44 | 131.26 | 134.63 | 134.61 | 134.72 | 138.42 | 125.88 | 141.21 |
| 2024 | 155.98 | 143.14 | 164.70 | 162.70 | 166.04 | 158.31 | 162.04 | 161.50 | 161.53 | 166.21 | 151.78 | 169.17 |
| 2025 | 120.53 | 110.61 | 127.27 | 125.73 | 128.31 | 122.33 | 125.21 | 124.80 | 124.82 | 128.44 | 117.28 | 130.73 |
| 2026 | 125.54 | 115.21 | 132.56 | 130.95 | 133.64 | 127.41 | 130.41 | 129.98 | 130.01 | 133.77 | 122.16 | 136.16 |
| 2027 | 131.11 | 120.32 | 138.44 | 136.76 | 139.57 | 133.06 | 136.20 | 135.75 | 135.78 | 139.71 | 127.57 | 142.20 |
| 2028 | 138.26 | 126.88 | 145.99 | 144.21 | 147.17 | 140.31 | 143.62 | 143.15 | 143.18 | 147.32 | 134.53 | 149.95 |
| 2029 | 144.23 | 132.36 | 152.30 | 150.44 | 153.53 | 146.37 | 149.82 | 149.33 | 149.36 | 153.69 | 140.34 | 156.42 |
| 2030 | 147.87 | 135.69 | 156.14 | 154.23 | 157.40 | 150.06 | 153.60 | 153.10 | 153.13 | 157.56 | 143.88 | 160.37 |
| 2031 | 152.18 | 139.65 | 160.68 | 158.73 | 161.99 | 154.43 | 158.07 | 157.56 | 157.59 | 162.15 | 148.07 | 165.04 |

6 Nuevos Actos de Contrataciones Programados

6.1 Contrataciones de Corto Plazo (2011-2015)

Para el año 2011, la demanda máxima de generación de las empresas distribuidoras (EDEMET, EDECHI, ENSA) que no esté cubierta con contratos será asignada al Servicio Auxiliar de Reserva de Largo realizado por el CND. En el caso de la energía, con el Acto de Concurrencia LPI N° ETESA 07-10 para la compra de Excedente de Energía Generada No Contratada para el periodo del 15 de enero al 30 de junio de 2011, se cubrirán los faltantes de energía no contratada del primer semestre del 2011. Para el segundo semestre del 2011, ETESA tiene programado para el mes de mayo realizar el Acto de Concurrencia LPI N° ETESA 02-11 para la compra de Excedente de Energía Generada No Contratada para el periodo del 1 de julio al 31 de diciembre de 2011.

Se tienen programados realizar los Actos de Concurrencia siguientes:

Acto LPI N° ETESA 01-11 para la contratación de Potencia y Energía Asociada para el periodo 2012-2014. El calendario propuesto es el siguiente:

1. Remisión del pliego a la ASEP: 15 de marzo de 2011.
2. Reunión aclaratoria: 12 de abril de 2011.
3. Recepción de ofertas: 28 de abril de 2011.

Montos correspondientes para cada empresa distribuidora.

Cuadro No. 32 Potencia a Solicitar para EDEMET 2012-2014 (MW)

| Años | Ene | Feb | Mar | Abr | May | Jun | Jul | Ago | Sep | Oct | Nov | Dic |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 2012 | 65.00 | 75.00 | 70.00 | 65.00 | 60.00 | 70.00 | 50.00 | 50.00 | 50.00 | 60.00 | 60.00 | 50.00 |
| 2013 | 40.00 | 40.00 | 40.00 | 40.00 | 35.00 | 40.00 | 35.00 | 30.00 | 30.00 | 40.00 | 30.00 | 30.00 |
| 2014 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 60.00 | 60.00 | 60.00 | 60.00 | 60.00 | 60.00 |

Cuadro No. 33 Potencia a Solicitar para EDECHI 2012-2014 (MW)

| Años | Ene | Feb | Mar | Abr | May | Jun | Jul | Ago | Sep | Oct | Nov | Dic |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 2012 | 5.00 | 2.00 | 10.00 | 15.00 | 10.00 | 5.00 | 25.00 | 20.00 | 20.00 | 12.00 | 20.00 | 25.00 |
| 2013 | 40.00 | 40.00 | 40.00 | 40.00 | 35.00 | 30.00 | 35.00 | 35.00 | 35.00 | 25.00 | 30.00 | 30.00 |
| 2014 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 |

Cuadro No. 34 Potencia a Solicitar para ENSA 2012-2014 (MW)

| Años | Ene | Feb | Mar | Abr | May | Jun | Jul | Ago | Sep | Oct | Nov | Dic |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 2012 | 30.00 | 23.00 | 20.00 | 20.00 | 30.00 | 25.00 | 25.00 | 30.00 | 30.00 | 28.00 | 20.00 | 25.00 |
| 2013 | 0.00 | 0.00 | 0.00 | 0.00 | 10.00 | 10.00 | 10.00 | 15.00 | 15.00 | 15.00 | 20.00 | 20.00 |
| 2014 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 |

Acto LPI N° ETESA 03-11 para la contratación de solo Potencia para el periodo 2012-2014. El calendario propuesto es el siguiente:

1. Remisión del pliego a la ASEP: 13 de mayo de 2011.
2. Reunión aclaratoria: 23 de junio de 2011.
3. Recepción de ofertas: 28 de julio de 2011.

Montos correspondientes para cada empresa distribuidora.

Cuadro No. 35 Potencia a Solicitar para EDEMET 2012-2014 (MW)

| Años | Ene | Feb | Mar | Abr | May | Jun | Jul | Ago | Sep | Oct | Nov | Dic |
|------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|-------|--------|
| 2012 | 60.00 | 60.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 60.00 | 100.00 |
| 2013 | 0.00 | 0.00 | 25.00 | 25.00 | 25.00 | 25.00 | 25.00 | 25.00 | 25.00 | 25.00 | 25.00 | 25.00 |
| 2014 | 40.00 | 40.00 | 60.00 | 60.00 | 60.00 | 60.00 | 60.00 | 60.00 | 60.00 | 65.00 | 60.00 | 60.00 |

Cuadro No. 36 Potencia a Solicitar para EDECHI 2012-2014 (MW)

| Años | Ene | Feb | Mar | Abr | May | Jun | Jul | Ago | Sep | Oct | Nov | Dic |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 2012 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2013 | 0.00 | 0.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 |
| 2014 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 0.00 | 5.00 | 5.00 |

Cuadro No. 37 Potencia a Solicitar para ENSA 2012-2014 (MW)

| Años | Ene | Feb | Mar | Abr | May | Jun | Jul | Ago | Sep | Oct | Nov | Dic |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 2012 | 20.00 | 20.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 |
| 2013 | 0.00 | 0.00 | 20.00 | 20.00 | 20.00 | 20.00 | 20.00 | 20.00 | 20.00 | 20.00 | 20.00 | 20.00 |
| 2014 | 15.00 | 15.00 | 25.00 | 25.00 | 25.00 | 25.00 | 25.00 | 25.00 | 25.00 | 25.00 | 25.00 | 25.00 |

Acto LPI N° ETESA 04-11 para la contratación de solo Energía para el periodo 2012-2014. El calendario propuesto es el siguiente:

1. Remisión del pliego a la ASEP: 1 de julio de 2011.
2. Reunión aclaratoria: 4 de agosto de 2011.
3. Recepción de ofertas: 25 de agosto de 2011.

Montos correspondientes para cada empresa distribuidora.

Cuadro No. 38 Energía a Solicitar para EDEMET 2012-2014 (Gwh)

| Años | Ene | Feb | Mar | Abr | May | Jun | Jul | Ago | Sep | Oct | Nov | Dic |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 2012 | 50.00 | 50.00 | 70.00 | 70.00 | 70.00 | 70.00 | 70.00 | 70.00 | 70.00 | 70.00 | 70.00 | 70.00 |
| 2013 | 0.00 | 0.00 | 25.00 | 25.00 | 25.00 | 25.00 | 25.00 | 25.00 | 25.00 | 25.00 | 25.00 | 25.00 |
| 2014 | 0.00 | 0.00 | 25.00 | 25.00 | 25.00 | 25.00 | 25.00 | 25.00 | 25.00 | 25.00 | 25.00 | 25.00 |

Cuadro No. 39 Energía a Solicitar para ENSA 2012-2014 (Gwh)

| Años | Ene | Feb | Mar | Abr | May | Jun | Jul | Ago | Sep | Oct | Nov | Dic |
|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 2012 | 0.00 | 0.00 | 20.00 | 20.00 | 20.00 | 20.00 | 20.00 | 20.00 | 20.00 | 20.00 | 20.00 | 20.00 |
| 2013 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2014 | 0.00 | 0.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 |

Parte de los requerimientos de potencia y energía para los años 2014 y 2015 se contratarán en los actos de concurrencia LPI N° ETESA 03-10 para la contratación de solo Energía para el periodo de 2014-2023 y el LPI N° ETESA 02-10 para la contratación de Potencia y Energía Asociada para el periodo de 2015-2029, actualmente en proceso.

6.2 Contrataciones de Largo Plazo (2016-2031)

Acto LPI N° ETESA 02-10 para la contratación de Potencia y Energía Asociada para el periodo de 2015-2029. El calendario propuesto es el siguiente:

1. Remisión del pliego a la ASEP (Adenda No. 2): 15 de marzo de 2011.
2. Reunión aclaratoria: 7 de octubre de 2010.
3. Recepción de ofertas: 28 de abril de 2011.

Montos correspondientes para cada empresa distribuidora.

Cuadro No. 40 Potencia a Solicitar para EDEMET (MW)

| Años | Ene | Feb | Mar | Abr | May | Jun | Jul | Ago | Sep | Oct | Nov | Dic |
|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 2015-2029 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |

Cuadro No. 41 Potencia a Solicitar para EDECHI (MW)

| Años | Ene | Feb | Mar | Abr | May | Jun | Jul | Ago | Sep | Oct | Nov | Dic |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 2015-2029 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 |

Cuadro No. 42 Potencia a Solicitar para ENSA (MW)

| Años | Ene | Feb | Mar | Abr | May | Jun | Jul | Ago | Sep | Oct | Nov | Dic |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 2015-2029 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 | 40.00 |

Acto LPI N° ETESA 03-10 para la contratación de solo Energía para el periodo de 2014-2023. El calendario propuesto es el siguiente:

1. Remisión del pliego a la ASEP (Adenda No. 1): 24 de enero de 2011.
2. Reunión aclaratoria: 7 de octubre de 2010.
3. Recepción de ofertas: 30 de junio de 2011.

Montos correspondientes para cada empresa distribuidora.

Cuadro No. 43 Energía a Solicitar para EDECHI (GWh)

| 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|------|------|------|------|------|------|------|------|------|------|
| 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 |

Cuadro No. 44 Energía a Solicitar para ENSA (GWh)

| 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|------|------|------|------|------|------|------|------|------|------|
| 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |

Acto LPI N° ETESA 06-11 para la contratación de Potencia y Energía Asociada para el periodo de 2015-2029. El calendario propuesto es el siguiente:

1. Remisión del pliego a la ASEP: 5 de agosto de 2011.
2. Reunión aclaratoria: 15 de septiembre de 2011.
3. Recepción de ofertas: 27 de octubre de 2011.

Montos correspondientes para cada empresa distribuidora.

Cuadro No. 45 Potencia a Solicitar para EDEMET (MW)

| Años | Ene | Feb | Mar | Abr | May | Jun | Jul | Ago | Sep | Oct | Nov | Dic |
|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 2015-2029 | 140.00 | 140.00 | 140.00 | 140.00 | 140.00 | 140.00 | 140.00 | 140.00 | 140.00 | 140.00 | 140.00 | 140.00 |

Cuadro No. 46 Potencia a Solicitar para ENSA (MW)

| Años | Ene | Feb | Mar | Abr | May | Jun | Jul | Ago | Sep | Oct | Nov | Dic |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 2015-2029 | 60.00 | 60.00 | 60.00 | 60.00 | 60.00 | 60.00 | 60.00 | 60.00 | 60.00 | 60.00 | 60.00 | 60.00 |

7 Nuevo Nivel de Contrataciones

Considerando el programa de licitaciones que ETESA realice para los periodos de corto y largo plazo en el año 2011, los niveles de contratación resultantes serian los siguientes.

7.1 Potencia Total Contratada

Cuadro No. 47 Potencia Total Contratada EDEMET (MW)

| AÑO | ENE | FEB | MAR | ABR | MAY | JUN | JUL | AGO | SEP | OCT | NOV | DIC |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 2011 | 481.07 | 505.07 | 478.07 | 479.07 | 468.07 | 481.07 | 523.07 | 470.07 | 483.07 | 472.07 | 468.07 | 468.07 |
| 2012 | 638.70 | 648.70 | 683.70 | 678.70 | 673.70 | 683.70 | 663.70 | 663.70 | 663.70 | 673.70 | 633.70 | 663.70 |
| 2013 | 670.55 | 670.55 | 695.55 | 695.55 | 690.55 | 695.55 | 690.55 | 685.55 | 685.55 | 695.55 | 622.85 | 622.85 |
| 2014 | 695.15 | 695.15 | 715.15 | 715.15 | 715.15 | 715.15 | 612.19 | 612.19 | 612.19 | 617.19 | 612.19 | 612.19 |
| 2015 | 715.21 | 715.21 | 715.21 | 715.21 | 715.21 | 715.21 | 715.21 | 715.21 | 715.21 | 715.21 | 715.21 | 715.21 |
| 2016 | 715.21 | 715.21 | 715.21 | 715.21 | 715.21 | 715.21 | 715.21 | 715.21 | 715.21 | 715.21 | 715.21 | 715.21 |
| 2017 | 715.21 | 715.21 | 715.21 | 715.21 | 715.21 | 715.21 | 715.21 | 715.21 | 715.21 | 715.21 | 715.21 | 715.21 |
| 2018 | 715.21 | 715.21 | 715.21 | 715.21 | 715.21 | 715.21 | 715.21 | 715.21 | 715.21 | 715.21 | 715.21 | 715.21 |
| 2019 | 519.21 | 519.21 | 519.21 | 519.21 | 519.21 | 519.21 | 519.21 | 519.21 | 519.21 | 519.21 | 519.21 | 519.21 |
| 2020 | 519.21 | 519.21 | 519.21 | 519.21 | 519.21 | 519.21 | 519.21 | 519.21 | 519.21 | 519.21 | 519.21 | 519.21 |
| 2021 | 504.21 | 504.21 | 504.21 | 504.21 | 504.21 | 504.21 | 504.21 | 504.21 | 504.21 | 504.21 | 504.21 | 504.21 |
| 2022 | 427.21 | 427.21 | 427.21 | 427.21 | 427.21 | 427.21 | 427.21 | 427.21 | 427.21 | 427.21 | 427.21 | 427.21 |
| 2023 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 |
| 2024 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 |
| 2025 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 |
| 2026 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 |
| 2027 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 |
| 2028 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 |
| 2029 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 |
| 2030 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2031 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Cuadro No. 48 Potencia Total Contratada EDECHI (MW)

| AÑO | ENE | FEB | MAR | ABR | MAY | JUN | JUL | AGO | SEP | OCT | NOV | DIC |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 2011 | 81.88 | 81.88 | 81.88 | 81.88 | 81.88 | 81.88 | 81.88 | 81.88 | 81.88 | 81.88 | 81.88 | 81.88 |
| 2012 | 89.78 | 86.78 | 94.78 | 99.78 | 94.78 | 89.78 | 92.71 | 87.71 | 87.71 | 79.71 | 87.71 | 92.71 |
| 2013 | 92.71 | 92.71 | 97.71 | 97.71 | 92.71 | 87.71 | 92.71 | 92.71 | 92.71 | 82.71 | 87.71 | 87.71 |
| 2014 | 93.20 | 93.20 | 93.20 | 93.20 | 93.20 | 93.20 | 88.20 | 88.20 | 88.20 | 83.20 | 88.20 | 88.20 |
| 2015 | 74.71 | 74.71 | 74.71 | 74.71 | 74.71 | 74.71 | 74.71 | 74.71 | 74.71 | 74.71 | 74.71 | 74.71 |
| 2016 | 74.71 | 74.71 | 74.71 | 74.71 | 74.71 | 74.71 | 74.71 | 74.71 | 74.71 | 74.71 | 74.71 | 74.71 |
| 2017 | 74.71 | 74.71 | 74.71 | 74.71 | 74.71 | 74.71 | 74.71 | 74.71 | 74.71 | 74.71 | 74.71 | 74.71 |
| 2018 | 74.71 | 74.71 | 74.71 | 74.71 | 74.71 | 74.71 | 74.71 | 74.71 | 74.71 | 74.71 | 74.71 | 74.71 |
| 2019 | 45.40 | 45.40 | 45.40 | 45.40 | 45.40 | 45.40 | 45.40 | 45.40 | 45.40 | 45.40 | 45.40 | 45.40 |
| 2020 | 45.00 | 45.00 | 45.00 | 45.00 | 45.00 | 45.00 | 45.00 | 45.00 | 45.00 | 45.00 | 45.00 | 45.00 |
| 2021 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 |
| 2022 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 |
| 2023 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 |
| 2024 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 |
| 2025 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 |
| 2026 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 |
| 2027 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 |
| 2028 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 |
| 2029 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 |
| 2030 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2031 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Cuadro No. 49 Potencia Total Contratada ENSA (MW)

| AÑO | ENE | FEB | MAR | ABR | MAY | JUN | JUL | AGO | SEP | OCT | NOV | DIC |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 2011 | 459.93 | 450.93 | 468.93 | 494.93 | 507.93 | 479.93 | 492.93 | 500.93 | 492.93 | 508.43 | 507.93 | 512.93 |
| 2012 | 472.82 | 465.82 | 492.82 | 492.82 | 502.82 | 497.82 | 497.82 | 502.82 | 502.82 | 500.82 | 492.82 | 497.82 |
| 2013 | 501.17 | 501.17 | 521.17 | 521.17 | 531.17 | 531.17 | 531.17 | 536.17 | 536.17 | 536.17 | 492.45 | 492.45 |
| 2014 | 519.66 | 519.66 | 529.66 | 529.66 | 529.66 | 529.66 | 490.85 | 490.85 | 490.85 | 490.85 | 490.85 | 490.85 |
| 2015 | 513.42 | 513.42 | 513.42 | 513.42 | 513.42 | 513.42 | 513.42 | 513.42 | 513.42 | 513.42 | 513.42 | 513.42 |
| 2016 | 513.42 | 513.42 | 513.42 | 513.42 | 513.42 | 513.42 | 513.42 | 513.42 | 513.42 | 513.42 | 513.42 | 513.42 |
| 2017 | 513.42 | 513.42 | 513.42 | 513.42 | 513.42 | 513.42 | 513.42 | 513.42 | 513.42 | 513.42 | 513.42 | 513.42 |
| 2018 | 513.42 | 513.42 | 513.42 | 513.42 | 513.42 | 513.42 | 513.42 | 513.42 | 513.42 | 513.42 | 513.42 | 513.42 |
| 2019 | 366.92 | 366.92 | 366.92 | 366.92 | 366.92 | 366.92 | 366.92 | 366.92 | 366.92 | 366.92 | 366.92 | 366.92 |
| 2020 | 346.92 | 346.92 | 346.92 | 346.92 | 346.92 | 346.92 | 346.92 | 346.92 | 346.92 | 346.92 | 346.92 | 346.92 |
| 2021 | 286.92 | 286.92 | 286.92 | 286.92 | 286.92 | 286.92 | 286.92 | 286.92 | 286.92 | 286.92 | 286.92 | 286.92 |
| 2022 | 263.92 | 263.92 | 263.92 | 263.92 | 263.92 | 263.92 | 263.92 | 263.92 | 263.92 | 263.92 | 263.92 | 263.92 |
| 2023 | 208.00 | 208.00 | 208.00 | 208.00 | 208.00 | 208.00 | 208.00 | 208.00 | 208.00 | 208.00 | 208.00 | 208.00 |
| 2024 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| 2025 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| 2026 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| 2027 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| 2028 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| 2029 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| 2030 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2031 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Energía Total Contratada

Cuadro No. 50 Energía Total Contratada EDEMET (GWh)

| AÑOS | ENE | FEB | MAR | ABR | MAY | JUN | JUL | AGO | SEP | OCT | NOV | DIC |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 2011 | 218.97 | 199.55 | 230.70 | 220.13 | 228.36 | 217.49 | 220.50 | 214.09 | 212.91 | 218.13 | 201.69 | 220.94 |
| 2012 | 285.20 | 275.36 | 320.02 | 302.97 | 309.43 | 303.26 | 296.76 | 290.07 | 288.33 | 298.80 | 281.84 | 296.85 |
| 2013 | 286.60 | 258.61 | 322.42 | 304.13 | 312.94 | 305.02 | 307.43 | 296.66 | 292.89 | 305.54 | 259.03 | 277.57 |
| 2014 | 299.96 | 270.63 | 336.75 | 317.78 | 329.83 | 318.75 | 273.52 | 265.33 | 262.59 | 269.30 | 252.78 | 272.34 |
| 2015 | 338.28 | 304.84 | 351.24 | 325.37 | 339.03 | 326.72 | 332.64 | 322.08 | 317.64 | 326.81 | 305.87 | 331.06 |
| 2016 | 338.12 | 314.13 | 351.37 | 325.39 | 339.05 | 326.71 | 332.77 | 321.81 | 317.64 | 326.72 | 305.74 | 330.88 |
| 2017 | 338.11 | 303.05 | 351.61 | 325.51 | 339.15 | 326.63 | 332.82 | 321.66 | 317.56 | 326.74 | 305.92 | 330.97 |
| 2018 | 337.98 | 303.12 | 351.63 | 325.55 | 339.14 | 326.48 | 332.81 | 321.63 | 317.50 | 326.46 | 305.76 | 330.96 |
| 2019 | 258.26 | 232.17 | 263.16 | 240.52 | 250.58 | 244.57 | 249.94 | 243.65 | 238.14 | 245.44 | 232.54 | 248.97 |
| 2020 | 259.71 | 241.83 | 264.64 | 242.09 | 252.21 | 246.16 | 251.57 | 245.23 | 239.69 | 247.03 | 234.05 | 250.59 |
| 2021 | 252.22 | 226.73 | 257.00 | 235.10 | 244.93 | 239.06 | 244.31 | 238.15 | 232.77 | 239.90 | 227.29 | 243.36 |
| 2022 | 213.71 | 192.13 | 217.76 | 199.20 | 207.53 | 202.56 | 207.00 | 201.79 | 197.23 | 203.27 | 192.59 | 206.20 |
| 2023 | 120.06 | 107.94 | 122.34 | 111.91 | 116.59 | 113.80 | 116.30 | 113.37 | 110.80 | 114.20 | 108.20 | 115.84 |
| 2024 | 120.07 | 111.80 | 122.34 | 111.92 | 116.60 | 113.80 | 116.30 | 113.37 | 110.81 | 114.20 | 108.20 | 115.85 |
| 2025 | 120.07 | 107.94 | 122.34 | 111.92 | 116.60 | 113.80 | 116.30 | 113.37 | 110.81 | 114.20 | 108.20 | 115.85 |
| 2026 | 120.08 | 107.95 | 122.35 | 111.92 | 116.60 | 113.81 | 116.31 | 113.38 | 110.81 | 114.21 | 108.21 | 115.85 |
| 2027 | 120.08 | 107.95 | 122.35 | 111.93 | 116.61 | 113.81 | 116.31 | 113.38 | 110.82 | 114.21 | 108.21 | 115.86 |
| 2028 | 120.08 | 111.82 | 122.35 | 111.93 | 116.61 | 113.82 | 116.32 | 113.38 | 110.82 | 114.22 | 108.21 | 115.86 |
| 2029 | 120.09 | 107.96 | 122.36 | 111.94 | 116.61 | 113.82 | 116.32 | 113.39 | 110.82 | 114.22 | 108.22 | 115.87 |
| 2030 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2031 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Cuadro No. 51 Energía Total Contratada EDECHI (GWh)

| AÑOS | ENE | FEB | MAR | ABR | MAY | JUN | JUL | AGO | SEP | OCT | NOV | DIC |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 2011 | 40.22 | 37.35 | 42.53 | 40.54 | 40.96 | 40.23 | 39.14 | 37.94 | 38.26 | 40.63 | 37.00 | 40.06 |
| 2012 | 43.75 | 39.84 | 48.81 | 48.55 | 46.68 | 43.34 | 45.02 | 41.39 | 41.80 | 40.65 | 40.86 | 46.46 |
| 2013 | 48.86 | 44.82 | 50.18 | 46.98 | 45.55 | 43.30 | 43.80 | 42.93 | 43.46 | 41.97 | 40.06 | 42.69 |
| 2014 | 46.73 | 42.50 | 49.58 | 47.39 | 46.72 | 45.75 | 43.75 | 41.71 | 41.92 | 43.53 | 40.93 | 44.62 |
| 2015 | 44.92 | 40.51 | 47.01 | 44.37 | 44.19 | 43.73 | 42.48 | 40.75 | 40.99 | 43.38 | 40.08 | 43.48 |
| 2016 | 44.84 | 41.13 | 46.91 | 44.37 | 44.19 | 43.79 | 42.52 | 40.72 | 40.97 | 43.38 | 40.06 | 43.45 |
| 2017 | 44.90 | 39.69 | 46.95 | 44.36 | 44.13 | 43.83 | 42.54 | 40.67 | 40.97 | 43.36 | 40.06 | 43.44 |
| 2018 | 44.94 | 39.76 | 47.00 | 44.31 | 44.20 | 43.86 | 42.55 | 40.67 | 40.97 | 43.40 | 40.06 | 43.43 |
| 2019 | 31.54 | 28.44 | 32.62 | 30.32 | 30.79 | 30.91 | 29.62 | 28.67 | 28.98 | 31.43 | 28.41 | 30.45 |
| 2020 | 31.32 | 29.07 | 32.41 | 30.12 | 30.62 | 30.73 | 29.42 | 28.51 | 28.80 | 31.30 | 28.25 | 30.25 |
| 2021 | 12.40 | 10.80 | 12.70 | 11.94 | 11.93 | 11.28 | 11.43 | 10.91 | 10.99 | 11.66 | 10.76 | 11.65 |
| 2022 | 12.07 | 10.80 | 12.65 | 11.90 | 11.90 | 11.78 | 11.41 | 10.89 | 10.97 | 11.63 | 10.72 | 11.62 |
| 2023 | 12.08 | 10.84 | 12.61 | 11.90 | 11.88 | 11.78 | 11.42 | 10.88 | 10.97 | 11.64 | 10.72 | 11.62 |
| 2024 | 5.50 | 5.25 | 5.59 | 5.11 | 5.31 | 5.43 | 5.12 | 5.05 | 5.12 | 5.71 | 5.03 | 5.32 |
| 2025 | 5.50 | 5.07 | 5.59 | 5.12 | 5.31 | 5.43 | 5.12 | 5.05 | 5.12 | 5.71 | 5.03 | 5.32 |
| 2026 | 5.50 | 5.07 | 5.59 | 5.12 | 5.31 | 5.43 | 5.12 | 5.05 | 5.12 | 5.71 | 5.03 | 5.32 |
| 2027 | 5.50 | 5.07 | 5.59 | 5.12 | 5.32 | 5.43 | 5.12 | 5.05 | 5.12 | 5.71 | 5.03 | 5.32 |
| 2028 | 5.50 | 5.25 | 5.59 | 5.12 | 5.32 | 5.43 | 5.12 | 5.05 | 5.12 | 5.71 | 5.03 | 5.32 |
| 2029 | 5.50 | 5.07 | 5.59 | 5.12 | 5.32 | 5.43 | 5.12 | 5.05 | 5.12 | 5.72 | 5.03 | 5.32 |
| 2030 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2031 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Cuadro No. 52 Energía Total Contratada ENSA (GWh)

| AÑOS | ENE | FEB | MAR | ABR | MAY | JUN | JUL | AGO | SEP | OCT | NOV | DIC |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 2011 | 235.55 | 205.74 | 237.52 | 221.18 | 239.20 | 229.65 | 240.01 | 235.19 | 231.82 | 248.61 | 229.48 | 244.23 |
| 2012 | 238.20 | 218.82 | 256.32 | 241.50 | 253.08 | 246.33 | 249.15 | 247.13 | 246.40 | 253.78 | 234.18 | 253.15 |
| 2013 | 264.37 | 239.11 | 268.26 | 253.72 | 266.28 | 261.65 | 264.86 | 262.07 | 261.22 | 270.99 | 233.54 | 250.33 |
| 2014 | 250.72 | 226.62 | 268.89 | 254.56 | 261.52 | 257.61 | 240.67 | 235.91 | 235.16 | 243.47 | 228.51 | 244.30 |
| 2015 | 280.89 | 253.79 | 284.22 | 263.65 | 271.36 | 267.21 | 270.28 | 264.47 | 263.54 | 273.55 | 255.77 | 274.49 |
| 2016 | 281.03 | 262.73 | 284.35 | 263.73 | 271.45 | 267.31 | 270.38 | 264.56 | 263.63 | 273.65 | 255.87 | 274.60 |
| 2017 | 281.12 | 253.98 | 284.41 | 263.78 | 271.50 | 267.37 | 270.43 | 264.60 | 263.67 | 273.69 | 255.92 | 274.67 |
| 2018 | 279.23 | 252.27 | 282.40 | 261.75 | 269.44 | 265.41 | 268.42 | 262.59 | 261.67 | 271.63 | 254.05 | 272.59 |
| 2019 | 201.69 | 182.18 | 203.94 | 188.98 | 194.54 | 191.66 | 193.82 | 189.60 | 188.93 | 196.13 | 183.45 | 196.83 |
| 2020 | 191.88 | 179.43 | 194.02 | 179.94 | 185.24 | 182.49 | 184.55 | 180.53 | 179.89 | 186.75 | 174.68 | 187.43 |
| 2021 | 159.02 | 143.64 | 160.80 | 149.13 | 153.52 | 151.24 | 152.95 | 149.62 | 149.09 | 154.77 | 144.77 | 155.36 |
| 2022 | 146.43 | 132.26 | 148.06 | 137.32 | 141.37 | 139.26 | 140.84 | 137.77 | 137.28 | 142.51 | 133.30 | 143.07 |
| 2023 | 115.76 | 108.24 | 117.06 | 108.59 | 111.78 | 110.11 | 111.36 | 108.94 | 108.55 | 112.69 | 105.40 | 113.14 |
| 2024 | 54.88 | 51.34 | 55.46 | 51.39 | 52.91 | 52.15 | 52.73 | 51.57 | 51.38 | 53.34 | 49.92 | 53.55 |
| 2025 | 54.89 | 49.57 | 55.47 | 51.39 | 52.91 | 52.15 | 52.73 | 51.57 | 51.38 | 53.35 | 49.92 | 53.56 |
| 2026 | 54.89 | 49.57 | 55.47 | 51.40 | 52.92 | 52.16 | 52.74 | 51.57 | 51.39 | 53.35 | 49.92 | 53.57 |
| 2027 | 54.90 | 49.58 | 55.48 | 51.40 | 52.92 | 52.16 | 52.74 | 51.58 | 51.39 | 53.36 | 49.93 | 53.58 |
| 2028 | 54.91 | 51.36 | 55.49 | 51.41 | 52.93 | 52.17 | 52.75 | 51.59 | 51.40 | 53.37 | 49.94 | 53.59 |
| 2029 | 54.91 | 49.59 | 55.49 | 51.42 | 52.94 | 52.17 | 52.76 | 51.59 | 51.41 | 53.37 | 49.94 | 53.60 |
| 2030 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2031 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

7.2 Niveles de Contratación de Potencia

Cuadro No. 53 Niveles de Contratación de Potencia EDEMET (%)

| AÑO | ENE | FEB | MAR | ABR | MAY | JUN | JUL | AGO | SEP | OCT | NOV | DIC | % MAX | PROM | %REG |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|------|
| 2011 | 77.47% | 79.31% | 72.25% | 70.64% | 69.16% | 74.50% | 82.51% | 74.75% | 74.38% | 73.61% | 76.37% | 73.13% | 82.51% | 74.84% | 100% |
| 2012 | 99.13% | 99.10% | 99.14% | 93.73% | 93.70% | 99.63% | 98.26% | 99.19% | 96.30% | 98.75% | 97.31% | 97.49% | 99.63% | 97.64% | 100% |
| 2013 | 98.95% | 97.64% | 95.74% | 92.32% | 92.13% | 97.19% | 97.94% | 99.03% | 95.89% | 97.95% | 91.87% | 88.03% | 99.03% | 95.39% | 90% |
| 2014 | 98.32% | 97.15% | 94.23% | 90.86% | 91.06% | 95.31% | 82.91% | 84.92% | 82.08% | 83.31% | 86.71% | 83.12% | 98.32% | 89.17% | 90% |
| 2015 | 97.91% | 96.96% | 90.67% | 86.02% | 85.97% | 90.35% | 91.70% | 94.26% | 90.91% | 91.52% | 96.18% | 92.03% | 97.91% | 92.04% | 80% |
| 2016 | 93.96% | 94.89% | 86.71% | 82.36% | 82.31% | 86.54% | 87.69% | 90.58% | 87.05% | 87.74% | 92.28% | 88.32% | 94.89% | 88.37% | 80% |
| 2017 | 89.72% | 90.86% | 82.55% | 78.51% | 78.49% | 82.69% | 83.67% | 86.64% | 83.19% | 83.75% | 87.89% | 84.23% | 90.86% | 84.35% | 70% |
| 2018 | 85.92% | 86.79% | 78.90% | 75.03% | 75.05% | 79.20% | 80.00% | 82.86% | 79.60% | 80.34% | 84.21% | 80.54% | 86.79% | 80.70% | 70% |
| 2019 | 59.65% | 60.31% | 54.73% | 52.07% | 52.12% | 55.05% | 55.53% | 57.55% | 55.31% | 55.81% | 58.45% | 56.00% | 60.31% | 56.05% | 60% |
| 2020 | 57.53% | 59.31% | 52.65% | 50.13% | 50.13% | 53.11% | 53.48% | 55.57% | 53.30% | 53.78% | 56.32% | 54.02% | 59.31% | 54.11% | 60% |
| 2021 | 53.30% | 53.95% | 48.85% | 46.49% | 46.62% | 49.12% | 49.59% | 51.67% | 49.49% | 49.93% | 52.27% | 50.01% | 53.95% | 50.11% | 50% |
| 2022 | 43.20% | 43.08% | 39.63% | 37.71% | 37.80% | 39.85% | 40.23% | 41.86% | 40.18% | 40.54% | 42.43% | 40.62% | 43.20% | 40.59% | 50% |
| 2023 | 23.18% | 23.10% | 21.29% | 20.26% | 20.33% | 21.40% | 21.55% | 22.52% | 21.61% | 21.79% | 22.80% | 21.83% | 23.18% | 21.80% | 40% |
| 2024 | 22.16% | 22.72% | 20.37% | 19.38% | 19.45% | 20.51% | 20.57% | 21.55% | 20.68% | 20.86% | 21.83% | 20.89% | 22.72% | 20.91% | 40% |
| 2025 | 21.13% | 21.29% | 19.46% | 18.51% | 18.60% | 19.54% | 19.64% | 20.63% | 19.77% | 19.94% | 20.82% | 19.92% | 21.29% | 19.94% | 30% |
| 2026 | 20.18% | 20.20% | 18.60% | 17.69% | 17.79% | 18.68% | 18.77% | 19.72% | 18.91% | 19.07% | 19.95% | 19.08% | 20.20% | 19.05% | 30% |
| 2027 | 19.27% | 19.27% | 17.78% | 16.90% | 17.01% | 17.85% | 17.95% | 18.85% | 18.09% | 18.24% | 19.07% | 18.24% | 19.27% | 18.21% | 30% |
| 2028 | 18.44% | 18.81% | 17.01% | 16.17% | 16.29% | 17.07% | 17.16% | 18.05% | 17.31% | 17.46% | 18.24% | 17.44% | 18.81% | 17.45% | 30% |
| 2029 | 17.52% | 17.64% | 16.23% | 15.44% | 15.55% | 16.28% | 16.38% | 17.21% | 16.53% | 16.67% | 17.42% | 16.66% | 17.64% | 16.63% | 30% |
| 2030 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 30% |
| 2031 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 30% |

Cuadro No. 54 Niveles de Contratación de Potencia EDECHI (%)

| AÑO | ENE | FEB | MAR | ABR | MAY | JUN | JUL | AGO | SEP | OCT | NOV | DIC | % MAX | PROM | %REG |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|--------|--------|---------|--------|------|
| 2011 | 92.26% | 90.41% | 85.41% | 83.68% | 89.24% | 95.29% | 90.45% | 94.21% | 95.43% | 105.26% | 96.86% | 93.10% | 105.26% | 92.63% | 100% |
| 2012 | 97.49% | 96.23% | 96.20% | 96.33% | 98.06% | 98.87% | 96.92% | 95.39% | 96.45% | 96.68% | 97.82% | 99.20% | 99.20% | 97.14% | 100% |
| 2013 | 96.13% | 98.69% | 95.23% | 91.68% | 93.26% | 93.68% | 93.76% | 97.76% | 98.53% | 97.06% | 94.42% | 90.68% | 98.69% | 95.07% | 90% |
| 2014 | 92.88% | 94.50% | 87.73% | 84.63% | 90.65% | 95.83% | 86.13% | 90.13% | 91.14% | 94.53% | 91.81% | 88.27% | 95.83% | 90.69% | 90% |
| 2015 | 71.69% | 74.35% | 68.21% | 64.74% | 69.44% | 73.21% | 69.59% | 73.08% | 74.06% | 81.26% | 74.61% | 71.43% | 81.26% | 72.14% | 80% |
| 2016 | 69.34% | 74.34% | 65.95% | 62.32% | 66.94% | 70.47% | 66.98% | 70.60% | 71.54% | 78.59% | 72.09% | 68.98% | 78.59% | 69.84% | 80% |
| 2017 | 66.58% | 71.67% | 63.31% | 59.87% | 64.51% | 67.73% | 64.36% | 68.10% | 68.87% | 75.88% | 69.41% | 66.39% | 75.88% | 67.22% | 70% |
| 2018 | 64.17% | 69.09% | 60.97% | 57.84% | 62.08% | 65.34% | 62.09% | 65.79% | 66.54% | 73.31% | 67.07% | 64.13% | 73.31% | 64.87% | 70% |
| 2019 | 37.60% | 40.32% | 35.60% | 33.89% | 36.33% | 38.31% | 36.39% | 38.75% | 39.12% | 43.06% | 39.36% | 37.70% | 43.06% | 38.04% | 60% |
| 2020 | 36.24% | 39.83% | 34.15% | 32.55% | 34.88% | 36.93% | 35.09% | 37.34% | 37.76% | 41.50% | 37.94% | 36.38% | 41.50% | 36.72% | 60% |
| 2021 | 7.76% | 8.21% | 7.31% | 6.97% | 7.46% | 7.92% | 7.53% | 8.01% | 8.11% | 8.92% | 8.15% | 7.81% | 8.92% | 7.85% | 50% |
| 2022 | 7.47% | 7.89% | 7.07% | 6.73% | 7.20% | 7.63% | 7.25% | 7.73% | 7.82% | 8.61% | 7.88% | 7.53% | 8.61% | 7.57% | 50% |
| 2023 | 7.20% | 7.56% | 6.85% | 6.49% | 6.97% | 7.35% | 6.99% | 7.46% | 7.54% | 8.30% | 7.61% | 7.26% | 8.30% | 7.30% | 40% |
| 2024 | 6.93% | 7.48% | 6.61% | 6.27% | 6.73% | 7.09% | 6.74% | 7.20% | 7.28% | 8.01% | 7.35% | 7.01% | 8.01% | 7.06% | 40% |
| 2025 | 6.67% | 6.99% | 6.38% | 6.04% | 6.51% | 6.83% | 6.49% | 6.94% | 7.02% | 7.72% | 7.08% | 6.76% | 7.72% | 6.79% | 30% |
| 2026 | 6.42% | 6.71% | 6.15% | 5.81% | 6.29% | 6.58% | 6.25% | 6.69% | 6.77% | 7.45% | 6.83% | 6.52% | 7.45% | 6.54% | 30% |
| 2027 | 6.18% | 6.45% | 5.94% | 5.60% | 6.07% | 6.34% | 6.02% | 6.46% | 6.53% | 7.19% | 6.59% | 6.29% | 7.19% | 6.31% | 30% |
| 2028 | 5.96% | 6.41% | 5.74% | 5.40% | 5.85% | 6.11% | 5.80% | 6.23% | 6.30% | 6.93% | 6.36% | 6.06% | 6.93% | 6.10% | 30% |
| 2029 | 5.73% | 5.95% | 5.53% | 5.20% | 5.64% | 5.89% | 5.59% | 6.01% | 6.08% | 6.69% | 6.13% | 5.85% | 6.69% | 5.86% | 30% |
| 2030 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 30% |
| 2031 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 30% |

Cuadro No. 55 Niveles de Contratación de Potencia ENSA (%)

| AÑO | ENE | FEB | MAR | ABR | MAY | JUN | JUL | AGO | SEP | OCT | NOV | DIC | % MAX | PROM | %REG |
|------|---------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|------|
| 2011 | 101.84% | 98.25% | 99.36% | 101.26% | 104.52% | 102.10% | 103.85% | 103.55% | 101.51% | 105.64% | 108.15% | 104.98% | 108.15% | 102.92% | 100% |
| 2012 | 99.19% | 99.60% | 98.94% | 93.25% | 95.99% | 98.25% | 97.05% | 96.18% | 95.82% | 96.30% | 97.11% | 94.27% | 99.60% | 96.83% | 100% |
| 2013 | 98.86% | 97.29% | 98.39% | 93.75% | 96.39% | 99.65% | 98.44% | 97.50% | 97.13% | 98.00% | 92.24% | 88.67% | 99.65% | 96.36% | 90% |
| 2014 | 97.53% | 95.99% | 95.13% | 90.64% | 91.45% | 94.54% | 86.55% | 84.92% | 84.60% | 85.36% | 87.47% | 84.11% | 97.53% | 89.86% | 90% |
| 2015 | 93.32% | 91.84% | 89.31% | 83.69% | 84.43% | 87.28% | 86.22% | 84.60% | 84.28% | 85.04% | 87.14% | 83.80% | 93.32% | 86.75% | 80% |
| 2016 | 90.21% | 91.94% | 86.33% | 80.90% | 81.62% | 84.37% | 83.35% | 81.78% | 81.47% | 82.20% | 84.24% | 81.02% | 91.94% | 84.12% | 80% |
| 2017 | 87.84% | 86.45% | 84.07% | 78.78% | 79.48% | 82.16% | 81.16% | 79.63% | 79.33% | 80.05% | 82.03% | 78.90% | 87.84% | 81.66% | 70% |
| 2018 | 84.96% | 83.62% | 81.31% | 76.19% | 76.87% | 79.47% | 78.50% | 77.02% | 76.73% | 77.42% | 79.34% | 76.31% | 84.96% | 78.98% | 70% |
| 2019 | 58.31% | 57.38% | 55.80% | 52.29% | 52.76% | 54.54% | 53.88% | 52.86% | 52.66% | 53.14% | 54.45% | 52.38% | 58.31% | 54.21% | 60% |
| 2020 | 53.06% | 54.08% | 50.78% | 47.63% | 48.05% | 49.67% | 49.07% | 48.15% | 47.96% | 48.40% | 49.59% | 47.71% | 54.08% | 49.51% | 60% |
| 2021 | 41.56% | 40.90% | 39.77% | 37.30% | 37.64% | 38.91% | 38.43% | 37.71% | 37.57% | 37.91% | 38.84% | 37.38% | 41.56% | 38.66% | 50% |
| 2022 | 36.67% | 36.08% | 35.09% | 32.91% | 33.21% | 34.33% | 33.91% | 33.27% | 33.15% | 33.44% | 34.27% | 32.98% | 36.67% | 34.11% | 50% |
| 2023 | 28.25% | 28.79% | 27.03% | 25.36% | 25.58% | 26.45% | 26.12% | 25.63% | 25.54% | 25.77% | 26.40% | 25.41% | 28.79% | 26.36% | 40% |
| 2024 | 13.19% | 13.45% | 12.63% | 11.84% | 11.95% | 12.35% | 12.20% | 11.97% | 11.93% | 12.03% | 12.33% | 11.87% | 13.45% | 12.31% | 40% |
| 2025 | 12.81% | 12.60% | 12.26% | 11.49% | 11.60% | 11.99% | 11.84% | 11.62% | 11.58% | 11.68% | 11.97% | 11.52% | 12.81% | 11.91% | 30% |
| 2026 | 12.30% | 12.10% | 11.77% | 11.04% | 11.14% | 11.51% | 11.37% | 11.16% | 11.12% | 11.22% | 11.49% | 11.06% | 12.30% | 11.44% | 30% |
| 2027 | 11.78% | 11.59% | 11.27% | 10.57% | 10.66% | 11.02% | 10.89% | 10.69% | 10.64% | 10.74% | 11.01% | 10.60% | 11.78% | 10.95% | 30% |
| 2028 | 11.17% | 11.38% | 10.69% | 10.03% | 10.11% | 10.46% | 10.33% | 10.13% | 10.10% | 10.19% | 10.44% | 10.05% | 11.38% | 10.42% | 30% |
| 2029 | 10.71% | 10.54% | 10.25% | 9.61% | 9.70% | 10.02% | 9.90% | 9.72% | 9.68% | 9.77% | 10.01% | 9.64% | 10.71% | 9.96% | 30% |
| 2030 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 30% |
| 2031 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 30% |

7.3 Niveles de Contratación de Energía

Cuadro No. 56 Niveles de Contratación de Energía EDEMET (%)

| AÑOS | ENE | FEB | MAR | ABR | MAY | JUN | JUL | AGO | SEP | OCT | NOV | DIC | % MAX | %REG |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|--------|---------|------|
| 2011 | 75.99% | 75.09% | 73.73% | 72.89% | 72.96% | 74.61% | 75.21% | 75.51% | 74.38% | 74.90% | 76.48% | 74.90% | 76.48% | 100% |
| 2012 | 95.22% | 97.16% | 97.96% | 96.08% | 94.87% | 99.79% | 97.08% | 98.27% | 97.02% | 98.56% | 102.81% | 96.73% | 102.81% | 100% |
| 2013 | 91.42% | 90.54% | 94.14% | 92.14% | 91.49% | 95.68% | 95.77% | 96.56% | 94.45% | 96.25% | 90.21% | 86.50% | 96.56% | 90% |
| 2014 | 91.68% | 90.90% | 94.10% | 92.14% | 91.99% | 95.33% | 81.35% | 82.91% | 81.15% | 81.30% | 84.51% | 81.52% | 95.33% | 90% |
| 2015 | 99.38% | 98.65% | 93.78% | 90.18% | 90.14% | 93.53% | 94.58% | 96.56% | 93.96% | 94.44% | 98.05% | 94.83% | 99.38% | 80% |
| 2016 | 95.32% | 96.05% | 89.71% | 86.34% | 86.31% | 89.58% | 90.47% | 92.70% | 89.98% | 90.51% | 94.03% | 90.96% | 96.05% | 80% |
| 2017 | 90.99% | 91.87% | 85.44% | 82.31% | 82.30% | 85.55% | 86.31% | 88.61% | 85.94% | 86.37% | 89.58% | 86.74% | 91.87% | 70% |
| 2018 | 87.10% | 87.78% | 81.67% | 78.67% | 78.68% | 81.90% | 82.52% | 84.73% | 82.21% | 82.78% | 85.78% | 82.94% | 87.78% | 70% |
| 2019 | 63.63% | 64.34% | 58.39% | 55.55% | 55.60% | 58.73% | 59.24% | 61.39% | 59.00% | 59.53% | 62.36% | 59.74% | 64.34% | 60% |
| 2020 | 61.37% | 63.28% | 56.17% | 53.48% | 53.48% | 56.66% | 57.06% | 59.29% | 56.86% | 57.37% | 60.08% | 57.63% | 63.28% | 60% |
| 2021 | 56.86% | 57.55% | 52.12% | 49.60% | 49.74% | 52.40% | 52.90% | 55.12% | 52.79% | 53.26% | 55.76% | 53.35% | 57.55% | 50% |
| 2022 | 46.08% | 45.96% | 42.27% | 40.23% | 40.33% | 42.51% | 42.91% | 44.65% | 42.87% | 43.24% | 45.26% | 43.33% | 46.08% | 50% |
| 2023 | 24.73% | 24.64% | 22.71% | 21.61% | 21.69% | 22.83% | 22.99% | 24.02% | 23.05% | 23.25% | 24.33% | 23.29% | 24.73% | 40% |
| 2024 | 23.64% | 24.23% | 21.73% | 20.67% | 20.75% | 21.88% | 21.95% | 22.99% | 22.07% | 22.26% | 23.28% | 22.28% | 24.23% | 40% |
| 2025 | 22.54% | 22.72% | 20.76% | 19.74% | 19.84% | 20.85% | 20.95% | 22.00% | 21.09% | 21.27% | 22.21% | 21.25% | 22.72% | 30% |
| 2026 | 21.52% | 21.55% | 19.84% | 18.87% | 18.98% | 19.93% | 20.03% | 21.04% | 20.17% | 20.35% | 21.28% | 20.36% | 21.55% | 30% |
| 2027 | 20.55% | 20.56% | 18.96% | 18.03% | 18.15% | 19.04% | 19.14% | 20.11% | 19.29% | 19.46% | 20.35% | 19.46% | 20.56% | 30% |
| 2028 | 19.68% | 20.07% | 18.15% | 17.25% | 17.38% | 18.21% | 18.30% | 19.25% | 18.47% | 18.62% | 19.46% | 18.61% | 20.07% | 30% |
| 2029 | 18.69% | 18.82% | 17.32% | 16.47% | 16.59% | 17.37% | 17.48% | 18.36% | 17.63% | 17.78% | 18.59% | 17.77% | 18.82% | 30% |
| 2030 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 30% |
| 2031 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 30% |

Cuadro No. 57 Niveles de Contratación de Energía EDECHI (%)

| AÑOS | ENE | FEB | MAR | ABR | MAY | JUN | JUL | AGO | SEP | OCT | NOV | DIC | % MAX | %REG |
|------|--------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|------|
| 2011 | 88.85% | 87.75% | 85.58% | 84.84% | 88.26% | 90.66% | 88.59% | 90.58% | 91.26% | 95.82% | 91.23% | 89.74% | 95.82% | 100% |
| 2012 | 92.96% | 90.59% | 95.40% | 98.14% | 97.32% | 94.18% | 98.53% | 95.43% | 96.14% | 92.44% | 97.06% | 100.11% | 100.11% | 100% |
| 2013 | 99.62% | 101.83% | 94.64% | 91.73% | 91.78% | 90.73% | 92.18% | 95.41% | 96.02% | 91.77% | 91.31% | 88.35% | 101.83% | 90% |
| 2014 | 91.57% | 91.96% | 90.31% | 89.56% | 91.02% | 92.29% | 88.89% | 89.82% | 90.06% | 92.16% | 90.21% | 89.39% | 92.29% | 90% |
| 2015 | 84.15% | 85.43% | 82.47% | 80.79% | 83.07% | 84.88% | 83.13% | 84.82% | 85.29% | 88.77% | 85.56% | 84.02% | 88.77% | 80% |
| 2016 | 81.25% | 83.73% | 79.57% | 77.76% | 80.06% | 81.81% | 80.07% | 81.87% | 82.34% | 85.84% | 82.61% | 81.07% | 85.84% | 80% |
| 2017 | 78.09% | 80.68% | 76.43% | 74.68% | 77.04% | 78.68% | 76.97% | 78.87% | 79.26% | 82.83% | 79.54% | 78.00% | 82.83% | 70% |
| 2018 | 75.34% | 77.89% | 73.68% | 72.05% | 74.26% | 75.95% | 74.26% | 76.18% | 76.57% | 80.08% | 76.84% | 75.32% | 80.08% | 70% |
| 2019 | 50.98% | 53.51% | 49.12% | 47.53% | 49.80% | 51.64% | 49.86% | 52.05% | 52.39% | 56.06% | 52.62% | 51.08% | 56.06% | 60% |
| 2020 | 48.94% | 52.34% | 46.97% | 45.46% | 47.66% | 49.60% | 47.86% | 49.98% | 50.38% | 53.91% | 50.55% | 49.08% | 53.91% | 60% |
| 2021 | 18.67% | 18.68% | 17.71% | 17.35% | 17.88% | 18.37% | 17.96% | 18.47% | 18.57% | 19.44% | 18.61% | 18.25% | 19.44% | 50% |
| 2022 | 17.50% | 17.95% | 17.07% | 16.71% | 17.21% | 17.66% | 17.27% | 17.77% | 17.87% | 18.72% | 17.94% | 17.56% | 18.72% | 50% |
| 2023 | 16.86% | 17.26% | 16.50% | 16.12% | 16.62% | 17.03% | 16.65% | 17.14% | 17.24% | 18.04% | 17.31% | 16.94% | 18.04% | 40% |
| 2024 | 7.40% | 7.98% | 7.05% | 6.68% | 7.18% | 7.56% | 7.19% | 7.68% | 7.77% | 8.55% | 7.84% | 7.48% | 8.55% | 40% |
| 2025 | 7.12% | 7.46% | 6.80% | 6.44% | 6.94% | 7.29% | 6.92% | 7.40% | 7.49% | 8.24% | 7.56% | 7.21% | 8.24% | 30% |
| 2026 | 6.85% | 7.16% | 6.56% | 6.20% | 6.71% | 7.02% | 6.67% | 7.14% | 7.22% | 7.95% | 7.29% | 6.95% | 7.95% | 30% |
| 2027 | 6.60% | 6.88% | 6.34% | 5.98% | 6.47% | 6.77% | 6.42% | 6.89% | 6.97% | 7.67% | 7.03% | 6.71% | 7.67% | 30% |
| 2028 | 6.35% | 6.84% | 6.12% | 5.76% | 6.24% | 6.52% | 6.19% | 6.64% | 6.72% | 7.40% | 6.78% | 6.47% | 7.40% | 30% |
| 2029 | 6.12% | 6.34% | 5.90% | 5.55% | 6.01% | 6.28% | 5.96% | 6.41% | 6.48% | 7.13% | 6.54% | 6.24% | 7.13% | 30% |
| 2030 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 30% |
| 2031 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 30% |

Cuadro No. 58 Niveles de Contratación de Energía ENSA (%)

| AÑOS | ENE | FEB | MAR | ABR | MAY | JUN | JUL | AGO | SEP | OCT | NOV | DIC | % MAX | %REG |
|------|---------|---------|--------|--------|--------|---------|---------|--------|--------|---------|---------|--------|---------|------|
| 2011 | 102.49% | 97.54% | 97.86% | 92.25% | 97.76% | 98.44% | 100.51% | 98.82% | 97.39% | 101.49% | 102.61% | 97.95% | 102.61% | 100% |
| 2012 | 98.00% | 98.09% | 99.86% | 95.24% | 97.80% | 99.84% | 98.66% | 98.18% | 97.88% | 97.96% | 99.00% | 96.01% | 99.86% | 100% |
| 2013 | 102.76% | 101.27% | 98.75% | 94.54% | 97.23% | 100.19% | 99.09% | 98.37% | 98.04% | 98.83% | 93.28% | 89.70% | 102.76% | 90% |
| 2014 | 92.70% | 91.31% | 94.15% | 90.22% | 90.83% | 93.84% | 85.65% | 84.24% | 83.95% | 84.47% | 86.82% | 83.28% | 94.15% | 90% |
| 2015 | 99.88% | 98.34% | 95.71% | 89.87% | 90.64% | 93.61% | 92.50% | 90.81% | 90.48% | 91.27% | 93.46% | 89.99% | 99.88% | 80% |
| 2016 | 96.59% | 98.40% | 92.55% | 86.89% | 87.64% | 90.51% | 89.44% | 87.81% | 87.49% | 88.25% | 90.37% | 87.02% | 98.40% | 80% |
| 2017 | 94.08% | 92.62% | 90.14% | 84.62% | 85.35% | 88.15% | 87.11% | 85.52% | 85.20% | 85.95% | 88.02% | 84.75% | 94.08% | 70% |
| 2018 | 90.37% | 88.97% | 86.55% | 81.21% | 81.92% | 84.63% | 83.62% | 82.08% | 81.77% | 82.49% | 84.50% | 81.34% | 90.37% | 70% |
| 2019 | 62.68% | 61.70% | 60.02% | 56.30% | 56.80% | 58.69% | 57.98% | 56.91% | 56.69% | 57.20% | 58.59% | 56.40% | 62.68% | 60% |
| 2020 | 57.07% | 58.15% | 54.65% | 51.30% | 51.75% | 53.47% | 52.83% | 51.85% | 51.66% | 52.12% | 53.39% | 51.39% | 58.15% | 60% |
| 2021 | 44.78% | 44.08% | 42.88% | 40.26% | 40.61% | 41.96% | 41.46% | 40.69% | 40.54% | 40.90% | 41.89% | 40.34% | 44.78% | 50% |
| 2022 | 39.55% | 38.93% | 37.87% | 35.56% | 35.87% | 37.06% | 36.61% | 35.94% | 35.80% | 36.12% | 37.00% | 35.63% | 39.55% | 50% |
| 2023 | 30.56% | 31.14% | 29.27% | 27.48% | 27.72% | 28.64% | 28.30% | 27.77% | 27.67% | 27.92% | 28.59% | 27.54% | 31.14% | 40% |
| 2024 | 14.07% | 14.35% | 13.47% | 12.63% | 12.75% | 13.18% | 13.02% | 12.77% | 12.72% | 12.84% | 13.16% | 12.66% | 14.35% | 40% |
| 2025 | 13.66% | 13.44% | 13.07% | 12.26% | 12.37% | 12.79% | 12.63% | 12.40% | 12.35% | 12.46% | 12.77% | 12.29% | 13.66% | 30% |
| 2026 | 13.12% | 12.91% | 12.55% | 11.78% | 11.88% | 12.28% | 12.13% | 11.90% | 11.86% | 11.97% | 12.26% | 11.80% | 13.12% | 30% |
| 2027 | 12.56% | 12.36% | 12.02% | 11.28% | 11.38% | 11.76% | 11.62% | 11.40% | 11.36% | 11.46% | 11.74% | 11.30% | 12.56% | 30% |
| 2028 | 11.91% | 12.14% | 11.40% | 10.69% | 10.79% | 11.15% | 11.02% | 10.81% | 10.77% | 10.87% | 11.14% | 10.72% | 12.14% | 30% |
| 2029 | 11.42% | 11.24% | 10.93% | 10.25% | 10.34% | 10.69% | 10.56% | 10.36% | 10.33% | 10.42% | 10.68% | 10.28% | 11.42% | 30% |
| 2030 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 30% |
| 2031 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 30% |