

### WORKS IN PROGRESS 2021 - 2022

### Optical Fiber 01 - CONSTRUCTION OF FTTH NETWORK - MENDOZA / SAN JUAN

Client: SUPERCANAL

• Work: Execution of works and services in ICT networks of the client in the Provinces of Mendoza and San Juan, through the deployment of new fibers direct to the home ("FTTH") to expand and improve the provision of Internet access services provided in such locations.

The project foresees the building of backbone and distribution networks and an initial total amount of approximately 900 FTTH nodes over 100,000 homes.

• Year: 2021

### Electrical Networks 02 - Repowering of high-voltage overhead line 132

• Client: EDEMSA

· Work: high-voltage overhead line between Cruz de Piedra and Villanueva power plants. Replacement

of the current conductor with a high-temperature conductor that allows greater energy transport. Total laying 12.5 km per phase.

It includes the assembly of new bases and columns, both simple and double.

- Location: Cruz de Piedra, Maipu, Mendoza
- Year: 2021

### 03- Executive Project – Rodriguez Peña Transformer Station

• Client: EDEMSA

• Work: executive project for the construction of a new transformer station called Rodriguez Peña, located in the industrial area of Carril Rodriguez Peña, Maipu, Mendoza.

- Location: Maipu, Mendoza
- Year: 2021

### 04- San Carlos Transformer Station– Pareditas Transformer Station– 33 Kv Underground cable

• Client: EDEMSA

• Work: Expansion of San Carlos transformer station and building of the new Pareditas transformer station. The link between both transformer stations will be made through the laying of a 33 Kv underground cable, having length of 24 km.

- Location: San Carlos, Mendoza
- Year: 2021



### C- Electrical Service Contracts

### BUSINESS UNIT – GENERATION AND DISTRIBUTION SERVICES PROVIDED TO TOWNS LOCATED IN HIGH MOUNTAIN AREAS - MENDOZA

Client: EDEMSA

Service Provision Agreement since 2008

**Power generation** in 5 thermal power plants. Operation, control and maintenance of motor generators and electrical installations.

**Distribution:** Operation, Preventive and Corrective Maintenance of the MV and LV electrical network, Substations, Public Lighting, Claims, Pruning of Electroducts, Assistance in Climatic Contingencies. **Business Management:** Electric service meter reading. Management of suspension orders, rehabilitations, commercial claims. Personalized customer service (pre- and post-sale). Home inspections. Maintenance at the point of sale.

**New Supplies:** Execution of works for new supplies of the different categories of clients. **Works:** Execution of expansion works and/or maintenance works of the electrical network. Infrastructure.

### COMPLETED WORKS

### HIGH VOLTAGE AND MEDIUM VOLTAGE ELECTRICAL NETWORKS

### 01- FUESMEN Work – Central Hospital

• Client: EDEMSA

• Work: the work was developed inside the venue of the Central Hospital of Mendoza, for the School of Nuclear Medicine Foundation. Modification of the circuit of power conduction cables in operation without affecting the service to the hospital.

- Location: City of Mendoza, Mendoza
- Year: 2021

### 02- CIVIL CONSTRUCTION OF DRUMMOND TRANSFORMER STATION

- Client: EDEMSA
- Work: Civil Construction of Drummond TS, permits management, earthing mesh.
- Location: Chile St. (near Ushuaia street), Lujan de Cuyo, Mendoza
- Year: 2018-2021



## 03- New Supply -T2 Tariff-COOP. NORTE MENDOCINO LTDA - LAVALLE

#### Client: EDEMSA

Work: Laying of approx. 3855m of cable (protected/bare/underground), installation of 6 double structures of H°A° and supports of 12/1800, installation of LV network for ancillary services for new camera provided by the client, installation of wooden supports, laying of a medium voltage underground cable of approx. 56 m (3x120 Al) on Cortaderas street, connection of medium voltage underground cable in Gustavo Andre distributor, installation of terminals in medium voltage underground cable, installation of 3 disconnectors and 3 electrical dischargers, removal of H°A° column and wooden posts, removal of existing medium-voltage overhead line (56m), electromechanical dismantling of substation V2070, electromechanical assembly of new camera, installation and provision of a new 1000 kVA transformer in a new chamber.

• Location: Calle 2 Cortadera St. (3500m north of Moyano), Gustavo Andre, Lavalle, Mendoza.

• Year: 2018-2021

# 04- EXPANSION OF MAIPU TRANSFORMER STATION AND INSTALLATION OF A NEW 13.2 KV CELL

#### Client: EDEMSA

Work: Expansion of Maipu TS building, installation of a new 13.2 kV cell with its related civil works for the expansion of the cable channel, laying of medium voltage underground cable and laying of MV pre-assembled overhead cables.

· Location: Maipu and surrounding areas, Maipu, Mendoza

• Year: 2018-2021

# 05- CONSTRUCTION OF A NEW BUILDING AND ASSEMBLY OF 13.2 KV CELLS – CARTELLONE TRANSFORMER STATION

• Client: EDEMSA

• Work: Construction of a new building to house the new primary cells to be installed, MV cells assembly, laying of power cables, laying of signal and telecommunications cables, transfer of existing equipment, transfer of SS.AA boards, CA and CC, transfer of transformer protection, command panels and the 66 kV field, assembly of protections, lighting and minor connections in LV, commissioning and plans.

- Location: Calle n°225, El Vergel, Lavalle.
- Year: 2018-2020

### 06- ALVAREZ LOT ELECTRIFICATION – "LUZ Y FUERZA" LABOR UNION

- Client: EDEMSA
- Work: Alvarez batch/lot electrification.
- Location: Uspallata, Las Heras, Mendoza
- Year: 2018-2019



# 07- REPLACEMENT OF 132 KV DISCONNECTORS AT SAN MARTIN TRANSFORMER STATION

- Client: EDEMSA
- Work: Replacement of 132 kV line input disconnectors at San Martín TS and other related works.
- Location: 9 de Julio and Peltier streets, Mendoza
- Year: 2018-2019

# 08- REPLACEMENT OF OVERHEAD LINE WITH BARE CONDUCTOR THROUGH COMPACT OVERHEAD LINE

• Client: EDEMSA

• Work: Replacement of the double-triad feeders made up of bare open lines with a double-triad compact network with protected cables.

• Location: West side North access NR40, between Pascual Segura and Independencia streets, Las Heras, Mendoza.

• Year: 2017-2019

### 09- ELECTROMECHANICAL REMODELING OF THE INDUSTRIAL PARK TRANSFORMER STATION– LAYING OF DOUBLE-TRIAD ELECTRICITY LINE WITH MEDIUM VOLTAGE UNDERGROUND CABLE

• Client: EDEMSA

• Work: Execution of two new 13.2 kV output fields in PIP TS, change of transformer no. 3 from 30 MVA to 50 MVA, electromechanical assembly in chamber at the customer's land level on NR No. 7, laying of double-triad electricity line with medium voltage underground cable of 300mm2 Al at 13.2 kV.

• Location: National Route 7 km 1057.5, Lujan de Cuyo, Mendoza

• Year: 2017-2019

### 10- REMODELING OF PARK DISTRIBUTION CENTER

• Client: EDEMSA

• Work: Laying of underground MV conductors and execution of connections, assembly of cells and removal of existing ones, execution of civil works, assembly of equipment, rectifier and transformer of SS.AA. (ancillary services).

- Location: Sobremonte and Boulogne Sur Mer streets, Mendoza
- Year: 2017-2019
- Amount of the agreement: AR\$11,733,90



### 11- RENEWAL OF MV SECONDARY CELLS AND ASSEMBLY OF 25 KVA TRANSFORMER AND EQUIPMENT– VIALIDAD DISTRIBUTION CENTER

• Client: EDEMSA

• Work: Replacement of all the 13.2 kV secondary cells consisting of a train of 19 cells, the assembly of a new 25 kVA three-phase transformer and the assembly of a new equipment. Realization of new boards of SS.AA. (ancillary services). Construction of a new cable channel to contain the new cells and its connection with the existing cable channel.

- Location: Misiones St. between Houssay and Italia streets, Mendoza
- Year: 2018

### 12- REPLACEMENT OF SWITCHES AT LAS HERAS TRANSFORMER STATION

- Client: EDEMSA
- Work: Replacement of switches in Las Heras TS up to Panquehua Distribution Center.
- Location: Las Heras TS, Mendoza
- Year: 2018

### 13- REMODELING OF RODEO DE LA CRUZ TRANSFORMER STATION

- Client: EDEMSA
- Work: Assembly of 6 primary distribution cells
- Location: Rodeo de la Cruz TS, Guaymallén, Mendoza.
- Year: 2018

### 14- ASSEMBLY OF A 13.2 KV COMPACT MEASUREMENT EQUIPMENT AND CONSTRUCTION OF SUBSTATION CN 251 160 KVA - CACHEUTA TUNNEL - MENDOZA

• Client: EDEMSA

• Work: Complete assembly of a 13.2 Kv compact measurement equipment, transfer of medium-voltage overhead line according to the Project plan, complete construction of Substation CN 251 160 kVA.

- Location: Provincial Route No. 82, Mendoza
- Year: 2017-2018

### 15- LAYING OF MV UNDERGROUND FEEDERS

- Client: EDEMSA
- Work: Transfer of Medium-Voltage Overhead Line Feeders (Uspallata and Potrerillos) according to the Approved Project Plan, laying of medium-voltage underground cable.
- Location: Uspallata, Lujan de Cuyo, Mendoza
- Year: 2017-2018



### 16- REPLACEMENT OF UNDERGROUND FEEDERS OF PANQUEHUA TRANSFORMER STATION 1 AND 2

• Client: EDEMSA

• Work: Laying of two 300 mm2 AI MV underground feeders, from the new Las Heras TS to Panquehua Distribution Center.

- Location: Las Heras TS, Mendoza
- Year: 2017-2018

### 17- REPLACEMENT OF 66 KV SWITCHES IN ARGENTINA TRANSFORMER STATION

- Client: EDEMSA
- Work: Replacement of three 66 kV switches belonging to the line fields in Argentina TS.
- Location: Argentina TS, Mendoza
- Year: 2016-2018

# 18- REPLACEMENT OF MEASUREMENT TRANSFORMERS IN SAN MARTIN TRANSFORMER STATION

- Client: EDEMSA
- Work: Replacement of six measurement transformers belonging to the line connection fields at San Martin TS.
- Location: San Martin TS, Mendoza
- Year: 2016-2018

# 19- LAYING OF FOUR MV UNDERGROUND FEEDERS FROM THE NEW CERRO DE LA GLORIA TRANSFORMER STATION

- Client: EDEMSA
- Work: Laying of four underground MV feeders from the new Cerro de la Gloria TS.
- Location: Cerro de la Gloria TS, Mendoza.
- Year: 2016-2017

### 20- NEW MV FEEDER FROM BOULOGNE SUR MER TRANSFORMER STATION TO PROCREAR CAPITAL

• Client: EDEMSA

• Work: Laying of medium-voltage underground cable 3x(1x300)mm2 Al from Boulogne Sur Mer TS to Procrear Capital through Boulogne Sur Mer and Jorge Newbery streets.

- Location: City of Mendoza.
- Year: 2016-2017
- Amount of the contract: AR\$19,164,309



### 21- REPLACEMENT OF 132 KV SWITCHES AT GUAYMALLEN TRANSFORMER STATION

- Client: EDEMSA
- Work: Replacement of two 132 kV switches belonging to the transformer centers.
- Location: Guaymallen TS, Mendoza.
- Year: 2016-2017

# 23- REPLACEMENT OF MV UNDERGROUND CABLES AT MAIPU TRANSFORMER STATION

• Client: EDEMSA

• Work: Replacement of old wet-insulated cables with dry-insulated cables at the outputs of Maipu TS in Gutierrez, Noceda, Fruticultores and La Colina distributors and associated works.

- Location: Maipu TS and surrounding areas, Maipu, Mendoza
- Year: 2016-2017

# 24- ADAPTATION AND REMODELING OF SAN RAFAEL AND EL CERRITO TRANSFORMER STATIONS

- Client: EDEMSA
- Work:

o In San Rafael TS: Adaptation and assembly of bars, assembly of power transformers, assembly of MV cells, laying of signal and telecommunications cables, commissioning and plans.

o In El Cerrito TS: Assembly of power transformers and auxiliary equipment, assembly of MV cells, battery bank, assembly and calibration of protections, laying of signal and telecommunications cables, lighting and minor LV connections, plans and commissioning.

- Location: Islas Malvinas and Av. Libertador streets//Av. Rawson and Silva, San Rafael, Mendoza
- Year: 2015-2017

### 25-ADAPTATION AND REMODELING OF GUAYMALLEN TRANSFORMER STATION

• Client: EDEMSA

• Work: Adaptation of 13.2 kV bar support, assembly of 13.2 kV intensity transformer, laying of single-core MV cables from the power transformer to the earthing transformer cell. Adaptation of protections in cells. Provision and assembly of cable trays and repair of the footbridge over the Cacique Guaymallen channel and construction of a pool for the transformer base.

- Location: Guaymallen TS, Mendoza
- Year: 2015-2017



## 26- LAYING OF MV UNDERGROUND LINE AND REMODELING OF RODEO DE LA CRUZ TRANSFORMER STATION

• Client: EDEMSA

• Work: Laying of MV underground line, assembly of primary cell in Rodeo de la Cruz TS, connection of protections, cell train in new distribution center, SS.AA. transformer, protections and other associated works.

- Location: Rodeo de la Cruz TS, Mendoza.
- Year: 2015-2016

## 27- INSTALLATION OF A CAPACITOR BANK FOR CUYOPLACAS SUBSTATION AND REMODELING IN LAVALLE TRANSFORMER STATION

- Client: EDEMSA
- Work: Installation of a capacitor bank for CuyoPlacas substation and remodeling in Lavalle TS
- Location: CuyoPlacas, Las Heras and Lavalle TS, Mendoza
- Year: 2015-2016

## 28- CONSTRUCTION, ASSEMBLY AND COMMISSIONING OF VILLANUEVA TRANSFORMER STATION

• Client: EDEMSA

• Work: Construction, assembly and start-up of a new 132 kV transformation center, adaptation of SS.AA., assembly and commissioning of an earthing transformer, laying of MV cables and transformer cell assembly in Villanueva TS.

- Location: Villanueva TS, Guaymallen, Mendoza.
- Year: 2015-2016

### 29- REPLACEMENT OF MV CABLES IN SAN RAFAEL TRANSFORMER STATION

- Client: EDEMSA
- Work: Laying of a second triad of single core conductors of 1x300mm2 Al 15kV, from San Martín TS to the chamber identified as G10130 located in La Barraca Mall, the distance is approximately 3700m.
- Location: San Martín TS La Barraca Mall, Guaymallen, Mendoza.
- Year: 2014-2017



### 30- LAYING OF MV UNDERGOUND CABLE FROM SAN MARTÍN TRANSFORMER STATION TO LA BARRACA MALL

• Client: EDEMSA

• Work: Laying of a second triad of single core conductors of 1x300mm2 Al 15kV, from San Martín TS to the chamber identified as G10130 located in La Barraca Mall, the distance is approximately 3700m.

- Location: San Martín TS La Barraca Mall, Guaymallen, Mendoza.
- Year: 2014-2017

### 31- CONSTRUCTION AND LAYING OF THE NEW LE PARC FEEDER AND DISTRIBUTION CENTER

• Client: EDEMSA

• Work: Laying of 1500m (approx.) of a double-triad electricity line with medium voltage underground cable, from ET Guaymallén TS to Le Parc lot. Installation of primary cells in Guaymallen TS. Construction of a Distribution Center and laying of the associated MV network.

- Location: Mitre and Godoy Cruz streets, San Jose, Guaymallen.
- Year: 2014-2017

## 32- ADAPTATION/CONSTRUCTION OF LAS VIÑAS AND TUPUNGATO TRANSFORMER STATIONS

• Client: EDEMSA

• Work: Construction of a 66 kV-33kV transformation center, installation of a 20 MVA transformer and a new command building for 33 kV in the existing Tupungato TS. In addition, the construction of a 33kV-13.2kV TS (civil and electromechanical) and the installation of a 20MVA transformer at Las Viñas lot, in the City of Vista Flores.

- Location: City of Vista Flores, Tunuyan.
- Year: 2014-2017

## 33- CONSTRUCTION OF A NEW 66-13.2 KV TRANSFORMATION CENTER OF 25 MVA

Client: EDEMSA

• Work: Construction of a new 66/13.2 kV transformation center of 25 MVA with all the complete equipment

- Location: TS Maipu, Mendoza
- Year: 2014-20167



## MEDIUM AND HIGH PRESSURE GAS NETWORKS

### 1- "SHELL" HIGH-PRESSURE BRANCH

• Work:

Construction of a High-Pressure Branch of 22 Ba ø12, feeding Shell Distillery.

Laying of 323 mm (12") diameter pipe, installed in public access streets.

At one end, it connects to the Section VI gas pipeline, while the other ends at a sidewalk service valve. Approximate length of gas pipeline: 1000m

- Location: Dock Sud, Avellaneda, Buenos Aires, Argentina.
- Year: 2014-2015

### 2- FEEDER LINES, INTERMEDIATE REGULATORY PLANT, AND CIVIL WORKS OF SURFACE FACILITIES FOR SUPPLYING NATURAL GAS TO THE TOWNS OF JUAREZ CELMAN STATION, GENERAL PAZ STATION, AND COLONIA TIROLESA, WITH PIPE SUPPLY.

- Client: Ministry of Water, Environment and Public Services Gov. Province of Cordoba
- Work: Construction of a Pressure Reducing Plant 61.7 25 kg/cm<sup>2</sup>, aerial type, isolated system, flow
- rate 4000 m³/h. Installation of Natural Gas feeder line Civil works. Installed length: 4120 m
- Location: Colonia Tirolesa, Cordoba, Argentina.
- Year: 2014

### 3- COATING OF TGS GAS PIPELINE TRANCHES

- Client: Transportadora de Gas del Sur S.A. (TGS)
- Work: Coating of pipes in 3 sections:SAO Conesa Tranche Conesa Colorado Tranche Lenght: 22.6 km
- Location: Rio Negro, Argentina
- Year: 2014-2015

### 4- CORDILLERAN SYSTEM EXPANSION

- Client: CAMUZZI
- Work:

Capacity expansion of the Cordilleran System - 3rd Stage.

Loops construction in Junin de Los Andes gas pipeline, 10" (15 km), in the Cordillera Gas Pipeline, 12" (16 km), and San Martín de Los Andes branch loop

• Year: 2010



### 5- SECRETARIAT OF ENERGY- GOVERNMENT OF ENTRE RIOS

Client: Province of Entre Rios

Work: Interconnection, measurement, regulation, and complementary works of natural gas for San Benito, Department of Parana, Province of Entre Ríos Year: 2010 - 2014

### 6- COLONIA SARMIENTO

Client: EMGASUD – Province of Santa Cruz

Work: Construction of the Patagonian Gas Pipeline Tranche I. It comprises 50 km of a gas pipeline with a diameter of 12", assembly of a separation and measurement station. Installation of scrapper traps. Connection with PAE Compressor Plant. Year: 2006

### 7- CORDILLERAN GAS PIPELINE

Client: CAMUZZI

Work: Capacity expansion of the Cordilleran System – 1st Stage. Construction of a 12" loop to the main gas pipeline. The Pilcaniyeu tranche has 4Km and the Paso Flores plant discharge has 5Km. Year: 2006

### 8- LAGOS REALICO GAS PIPELINE

Client: CAMUZZI

Work: Reinforcement of the Pampas System. Loop Coronel H. Lagos – Realicó – 28 km, diameter 4", requiring the execution of special crossings, connections to the existing gas pipeline and diversion. Year: 2006

### 9- FERREYRA PLANT ADAPTATION

Client: TGN

- Work: Change of valves, adaptation of mobile scrubber and change of pipes Change of 24", 18" and
- 10" valves in Ferreyra, scrubber launch and scrubber trap in Dean Funes and Ferreyra, change of pipes.
- Year: 2005



### 10- BUENOS AIRES / MONTEVIDEO GAS PIPELINE

#### Client: TGS

Work: Construction of the Argentine tranche (Gas Link), from the TGS delivery point to the Rio de la Plata crossing connection. The work included the installation of 36 km of gas pipeline, with a diameter of 18", plus 4 km of 24" diameter in a semi-urban laying, with 1,500 meters of directed drilling in swampy terrain, highway crossings, and the installation of a fiscal regulation and metering station. Year: 2005

### 10- BUENOS AIRES / MONTEVIDEO GAS PIPELINE

#### Client: TGS

Work: Construction of the Argentine tranche (Gas Link), from the TGS delivery point to the Rio de la Plata crossing connection. The work included the installation of 36 km of gas pipeline, with a diameter of 18", plus 4 km of 24" diameter in a semi-urban laying, with 1,500 meters of directed drilling in swampy terrain, highway crossings, and the installation of a fiscal regulation and metering station. Year: 2005

### 11- SAN MIGUEL DEL MONTE – LOBOS GAS PIPELINES

Client: CAMUZZI

• Work: Agreements for the renewal of feeder lines to the Cities of San Miguel del Monte and Lobos and the reinforcement of the supply gas pipeline to the City of Lobos.

• Year: 2005

### 12- BOLEADORAS GAS PIPELINE

• Client: PETROBRAS

• Work: Construction of Campo Boleadoras Barda Las Vegas Oil Pipeline. Construction of a 43 km oil pipeline in 6" and conversion of another oil pipeline to a gas pipeline of 43 km in 10". The project also included the dismantling of 50-ton CAT motor pumps, the assembly of Sulzer electric pumps, and the installation of a power motor generator.