INTERNATIONAL RESCUE COMMITTEE, BOSNIA AND HERZEGOVINA

Support to Minority Return in Bosnia and Herzegovina through Infrastructure Rehabilitation 2001

Award Number (168-G-00-01-00103-00)

Final Report Submitted for
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Project Summary

On January 26, 2001, the United States Agency for International Development (USAID) committed USD 1,427,830.00 to the International Rescue Committee Bosnia and Herzegovina (IRC) for a project 'Support to Minority Return in Bosnia and Herzegovina through Infrastructure Rehabilitation.' The aim of this project was to aid minority return in Bosnia through the rehabilitation of vital electrical infrastructure. The project was implemented in four key municipalities in Bosnia: Gacko, Nevesinje, and Kotor Varos in Republika Srpska (RS), and Velika Kladusa in the Federation of Bosnia and Herzegovina.

These locations were targeted based on two main criteria:

- they were already receiving housing reconstruction assistance, but return remained problematic due to the lack of complementary infrastructure;
- they were identified as priorities within post-Dayton strategic plans for return adopted by the international community, including the US government.

Through its monitoring of the return environment at the field level, IRC identified specific communities in these municipalities as most immediately in need of assistance. In the target communities, homes were being rehabilitated under projects funded by USBPRM and the European Union (EU). The program maximized the impact of these return and reconstruction projects by providing complementary infrastructure rehabilitation. The integrated approach resulted in higher rates of actual and sustainable return by addressing a range of basic needs.

By way of this project, IRC was able to rehabilitate 34.19 km of high-voltage electrical network (6.79 km more than expected) and 35,84 km of low-voltage electrical network (2.54 km more than expected). Low voltage network repairs consisted of pole replacement, the installation of associated insulators, clips, and other connection materials to secure reliable electrical supply to the substations. IRC provided direct house connections for the 296 beneficiary families, 58 more than anticipated in the proposal.

Moreover, seventeen 10/0.4kV pole-mounted step-down transformers were built or rehabilitated. A new substation was installed in the main transformer station in Gacko and the HV switchboard RP 20-10kV in Bojna was reconstructed. Furthermore, this project helped thousands of people in the area receive service through the rehabilitated electrical networks by providing a more reliable source of energy and improving the safety of the infrastructure. Overall, interventions directly assisted 296 beneficiary families, rehabilitated the pre-war infrastructure in the outlined communities, and increased the likelihood of future return.

The project repaired the power supply systems in the following local communities:

1. Fazlagica Kula (Gacko Municipality, RS)
2. Hrusta and Borovcici (Nevesinje Municipality, RS)
3. Bosanska Bojna (Velika Kladusa Municipality, Federation)
4. Ravne, Hrvacani, Kovacevici, Dabovci, Donje Podbrdje and Hadrovci (Kotor Varos Municipality, RS)

The following is a summary of works completed under this contract:

Location	High voltage (Km)	Low Voltage (Km)	10/0.4kV pole-mounted step-down Transformer	House connection
Banja Luka (FO)	12	10.4	3	157
Bihac (FO)	6.69	10.64	4	51
Mostar (FO)	15.5	14.8	10	88
Grand Total	**34.19**	**35.84**	**17**	**296**

Project background and justification

Banja Luka Field Office (covering Kotor Varos Municipality)

After mass displacement during the war, a high number of refugees and displaced persons had indicated their intent to return or had in fact already returned to Kotor Varos at the time of project development.

IRC selected the specific locations based on:

- The high degree of spontaneous return to the area
- The high number of registrations for return (4,900 at the time of project development)
- Considerable desire for additional return to the area as expressed by further potential returnees
- The high degree of political will that exists on the part of municipal officials to support the return process in the target area
- OHR, UNHCR and RRTF have identified the area as a priority area for the implementation of an integrated return program
- The fact that infrastructure repairs had not been addressed by recent or ongoing reconstruction programs and were needed in order to enhance sustainability of return

Kotor Varos Municipality (Hrvacani, Ravne, Kovacevici, Dabovci, Donje Podbrje, Hadrovci Villages)

In the selected locations, return was ongoing but was not sustainable due to lack of technical infrastructure. Following a formal agreement with OHR, UNHCR, and IPTF, minority Bosniak returnees in all these locations were actively clearing their properties of debris in anticipation of full reconstruction. Developments in the implementation of property legislation in Bosnia had led to an increase in the number of evictions and encouraged returnees of all ethnic backgrounds to repossess their properties, thereby boosting the return process.

The village of Hrvacani had become a focus for spontaneous return. Hrvacani is comprised of approximately 105 houses, most of which were seriously damaged. During the project design phase IRC identified approximately 35 households that are in the process of returning, and an additional 70 were likely to follow suit during the spring of 2002. IRC reconstructed 11 houses for Bosniak returnees with EC funding OBNOVA 2000.

Ravne is comprised of approximately 120 houses, most of which were seriously damaged. During the project design phase IRC identified 20 households in the process of returning, and an additional 50 that were likely to follow suit during the spring of 2002. IRC reconstructed 10 houses for 10 Bosniak families with EU funding in 2000/01 and upgraded roads to improve accessibility to the targeted village. The Dutch Government repaired the primary school in Ravne, complementing both the EU project and this project.

Hadrovci is made up of Donji and Gornji Hadrovci and is comprised of approximately 250 houses, most of which are seriously damaged. During the project design phase IRC identified 20 households that had started the process of returning, and the rest were likely to follow suit during the spring of 2002.

Bihac Field Office (covering Velika Kladusa Municipality)

Velika Kladusa Municipality

During the war, Velika Kladusa municipality experienced the only intra-ethnic fighting within Bosnia, and political tension, hatred and discrimination still exist as a result. Since the end of the war, over 20,000 individuals have returned to the Velika Kladusa municipality, representing the largest single incidence of return in Bosnia. However, approximately 8,000 younger families have subsequently left again due to poor living conditions and political and economic difficulties, leaving behind a vulnerable elderly population, few of whom receive family support.

Virtually the entire electrical network in the target location was war-damaged and badly in need of repair. The municipal authorities, UNHCR, and OHR/RRTF considered the

rehabilitation of the electricity network to be a high priority for 2000/2001 in order to make return sustainable in the municipality.

In Bosanska Bojna village, 36 minority Serb families had already returned to houses reconstructed by IRC through projects funded by UNHCR, ECHO, and the Dutch Government. An additional 20 Serb families from Bosanska Bojna return weekly from Prijedor Municipality to clean up their houses, and are likely to remain once external assistance has been provided. The USAID project included immediate assistance in the form of house connections to the electricity network for minority Serb families who had spontaneously returned, also encouraging and enabling follow-on return.

Mostar Field Office (covering Gacko and Nevesinje Municipalities)

Bosniaks from Gacko and Nevesinje municipalities were expelled at the onset of fighting in 1992 and found refuge in areas controlled by the Army of the Republic of Bosnia. The majority of these Bosniak displaced persons (DPs) reside in the Mostar region, occupying Bosnian Croat and Bosnian Serbs homes. Damage to properties in the target communities was not the result of front line fighting, rather the result of ethnic cleansing campaigns during the early stage of the war. Looting and fire damaged the majority of dwellings and infrastructure facilities.

In late 1998, the international community identified a potential for Bosniak minority return, primarily from the Mostar region to the areas of Nevesinje and Gacko. Although preparations began in 1998, the first returns occurred in spring of 1999. These returns marked the first breakthrough movements into eastern Republika Srpska. Although late in the season, the returns demonstrated serious commitment on the part of Bosniak DPs to return to their pre-war communities in the eastern RS, especially given the unstable security environment and hard line position of municipal leadership in the eastern RS.

In the case of Nevesinje and Gacko, the returnees have received limited support from the Federation government institutions. The HNK (Herzegovina-Neretva Canton) provided reconstruction materials to repair one home in each return community to be used as collective accommodation. The repair of related infrastructure was aimed at providing conditions conducive to return.

Gacko Municipality (Fazlagica Kula Local Community)

The municipality of Gacko had a pre-war population of approximately 10,000 inhabitants, with Bosniaks representing 35% of the population and Bosnian Serbs 63%. Presently, the municipality population numbers approximately 12,500 inhabitants, with Bosnian Serbs representing 99.9%, of which approximately 4,500 are DPs, mainly from Sarajevo and Central Bosnia.

The local community of Fazlagica Kula consists of 13 hamlets. Over 99% of the approximately 1,000 residents were Bosniak, representing 257 households. Fazlagica Kula center is located 5 kilometers south of the Gacko town center. All residents fled the

fighting and more than 100 lost their lives in the flight. Most displaced families settled in Bijelo Polje region of Mostar, while some moved to Sarajevo to live with relatives. The return movement began on August 23, 1999 with one person remaining overnight in collective accommodation, and subsequently slowly accelerated. IRC implemented works under OBNOVA 2000 including the repair of 24 houses in Kula center alongside water chambers. Moreover, American Refugee Committee (ARC) and Catholic Relief Services (CRS) repaired 13 houses, both with funding from the US Government. The fundamental issue of related technical infrastructure, however, remained unattended prior to the USAID project.

Nevesinje Municipality (Hrusta and Borovcici Local Communities)

The municipality of Nevesinje had a pre-war population of approximately 15,000 inhabitants, with Bosniaks representing 23% of the population and Bosnian Serbs 74%. At project design, of the 19,000 inhabitants, over 99% were Bosnian Serbs, approximately 7,500 of whom DPs from Mostar and Sarajevo. Bosniak minority returns started in July and August of 1999 in eight villages. The municipality is committed to return, and a number of NGOs are supporting their efforts through the implementation of an integrated package of projects in infrastructure, house reconstruction, agriculture support and economic development.

This project was implemented in the villages of Hrusta and Borovcici. Hrusta had a pre-war population of 60 families, 26 of whom returned or are in the process of returning. Borovcici had a pre-war population of 40 families, 31 of whom returned or are in the process of returning.

Achievements against objectives

The goal of this project was to enhance the sustainability of current and confirmed minority returns and to create the conditions for further return. The project had two specific objectives. The first was to enhance the sustainability of return by improving the living conditions of spontaneous minority returnees through the reconstruction of electricity systems for families who have returned to homes about to be reconstructed under PRM and EU funded projects. The second objective was to create the conditions for further return by improving access to technical infrastructure for present and potential returnees.

The final selection of direct beneficiaries was based on the following criteria:

- Willingness to return indicated by daily presence at the house and debris cleaning
- Feasibility of the house repair from a technical viewpoint
- Proof of property ownership, including positive CRPC findings
- Vulnerability of the family
- Eviction order issued
- Potential for secondary return

All houses were connected after consultation with a donor representative as well as the local utility company Elektrodistribucija, which is the institution responsible for all electricity-related infrastructure. Elektrodistribucija representatives officially approved all electrical installations, and connected houses were inspected by supervising authorities, the contractor and Elektrodistribucija representatives.

Banja Luka area – Kotor Varos Municipality

The IRC team technically assessed the dwellings covered under this project and conducted the tendering procedures for the design and the rehabilitation works. IRC contracted DOO Elbing-Banja Luka to repair the high and low voltage transmission lines and transformer stations throughout the six villages in Kotor Varos municipality. The works ensured housing connections for 207 returnee families in the following villages: Hrvacani, Ravne, Hadrovci, Dabovci, Kovacevici and Donje Podbrdje. The majority of these families have returned to the dwellings repaired by the IRC or some other NGO. Moreover, the main impact of the implemented project is that 157 Bosniak returnee families were able to connect to the electrical supply system, as follows:

- 76 families from Hrvacani
- 38 families from Ravne
- 30 families from Hadrovci
- 10 families from Dabovci
- 3 families from Kovacevici

In addition, 50 homes that are presently under reconstruction by other NGOs will be connected to the power supply system once they are completed.

In an effort to reach the given objectives IRC repaired:

- 12 km of high voltage transmission line
- 10.4 km low voltage network
- 3 transformer stations

Location	High voltage (Km)	Low Voltage (Km)	10/0.4kV pole-mounted step-down Transformer	House connection
Hrvacani	3	3.3	1	76
Ravne	0.4	2.9	1	38
Hadrovci	5.6	1.8	1	30
Dabovci		1.2		10
Kovacevici		1.2		3
Donje Podbrdje	3			
Total	**12**	**10.4**	**3**	**157**

Bihac area - Velika Kladusa Municipality

Upon IRC's request, Elektrodistribucija arranged all basic information necessary for the project documentation. The project was broken up into nine segments. The technical

acceptance from Elektrodistribucija, the responsible agency within Una Sana canton, was obtained for all segments for Bosanska Bojna and Gradina. The IRC team technically assessed all 51 dwellings to be connected to the rehabilitated network. Elektrodistribucija approved the connection of all 51 dwellings on the repaired power supply system after verifying the installation systems in each house and the presented technical documentation.

Results achieved:

1. DV 20(10) kV transmission line TS 110/X kV "Vrnograc"-RP 20 kV "Bosanska Bojna" - repaired
2. 20(10) kV transmission line RP 20 kV "Bosanska Bojna"-STS-B 10(20)/0,4 kV "Bosanska Bojna 3" and transformer STS-B 10(20)/0,4 kV Bosanska Bojna 3 - repaired
3. Auxiliary 20(10) kV power line for connection of STS-B 10(20)/0,4 kV "Bosanska Bojna 2" and transformer STS-B 10(20)/0,4 kV "Bosanska Bojna 2" - repaired
4. Auxiliary 20(10) kV power line for connection of STS-B 10(20)/0,4 kV "Bosanska Bojna 1" and transformer STS-B 10(20)/0,4 kV "Bosanska Bojna 1" - repaired
5. Transformer STS-B 10(20)/0,4 kV "Gradina" - repaired
6. Low voltage net for transformer area Bosanska Bojna 1 - repaired
7. Low voltage net for transformer area Bosanska Bojna 2 - repaired
8. Low voltage net for transformer area Bosanska Bojna 3 - repaired
9. Low voltage net for transformer area Gradina – repaired

After consultation with the regional USAID engineer, the projected works for the auxiliary 20 kV power line for connection of STS-B Gradina were changed due to the high risk of land mines. The de-mining process would have delayed the project several months. IRC requested and received permission from Elektrodistribucija to change previously projected line for a temporary service route on September 25, 2001.

Houses listed below were connected to LV network:

- 27 Serb families were direct beneficiaries returned to houses reconstructed by IRC under projects funded by UNHCR, ECHO, and the Dutch Government (one out of 26 reconstructed dwellings is a two family home).
- 12 Serb families (spontaneous returnees) were also connected to repaired power system.
- 12 Bosniak families who were temporarily connected to an improvised electrical power system were included in this project.
- One connection for the local water tank

Location	High voltage (Km)	Low Voltage (Km)	10/0.4kV pole-mounted step-down Transformer	House connection
Bosanska Bojna	6.69	10.640	4	51

Mostar Area - Gacko and Nevesinje Municipalities

Gacko Municipality

In Gacko municipality the electrical network was reconstructed in six villages in the area of Fazlagica Kula: Basici, Drugovici, Branilovico, Hodinici, Medjulici and Stolac. In addition, IRC reconstructed the Vrbica switchyard. The works were performed through two subprojects:

1. Reconstruction of the electrical network in the villages Basici, Drugovici, Branilovici and Hodinici

IRC worked with the local electrical company Elektro-Gacko to design and prepare project tasks for the reconstruction of the 10kV transmission line, the transformer station 10(20)/0.4kV and the low voltage network in the four mentioned villages. Following completion of a tender process, the Tehnicko Ekoloski Zavod (TEZ) company was contracted to complete the project design and documentation. This phase was completed in June 2001. Following completion of the tender process, the DALING company from S.Sarajevo was contracted to complete the project works. The technical acceptance of the project works was performed on October 30 with no remarks or objections made. All project works were completed on time and according to applicable technical standards and regulations.

2. Reconstruction of the electrical network in the hamlets Medjulici and Stolac and reconstruction of the switchyard Vrbica

IRC worked with the local electrical company Elektro-Gacko to design and prepare project tasks for the reconstruction of the 10kV transmission line, transformer station 10(20)/0.4kV and the low voltage network in the hamlets of Medjulici and Stolac and the Vrbica switchyard. Following completion of a tender process, the DELTA-Z company from Mostar was contracted to complete the Project Design and Documentation for the hamlets of Medjulici and Stolac. Subsequent to the completion of a tender process and after the tender process the DALING company was selected to perform the projected works.

The technical acceptance of the project works was performed with no remarks or objections made by the attending parties. All project works were completed on time and according to the applicable technical standards. IRC will organize an official project closing ceremony once weather conditions improve. Donor and IRC representatives, municipal officials and Elektro-Privreda RS, as well as media representatives will be invited to attend the ceremony.

In addition IRC provided educational equipment for the local electrical company “Elektro-Gacko”.

Nevesinje Municipality

In Nevesinje municipality the electrical network was reconstructed in two villages: Hrusta and Borovcici. IRC worked with the local electrical company Elektro-Nevesinje to design and prepare project tasks for the reconstruction of the 10kV transmission line, transformer station 10(20)/0.4kV and the low voltage network in these villages. Following the completion of a tender process, the BANKOM INZENJERING company was contracted to complete the project design and documentation. Subsequent to completion of a tender process, NSSN company was selected to perform the projected works. On December 12, 2001, the technical acceptance of the project works took place with no objection by the attending parties. All project works in this municipality, were completed on time and according to applicable technical standards and regulations.

Lower than expected prices for some of the equipment necessary for this project made it possible to expand the beneficiary pool assisted and the works performed. 50 houses were connected to the electricity network in Hrusta and Borovcici. Future house reconstructions in the both villages can also be connected to the network. In addition, IRC has provided educational equipment for the local electrical company "Elektro-Nevesinje".

The following works were performed:

- 7 km of high voltage network were reconstructed in Hrusta and Borovcici
- 4 km of low voltage network were reconstructed in Hrusta and Borovcici
- 4 step-down transformers were replaced in Hrusta and Borovcici
- 50 houses were connected to the electricity network in Hrusta and Borovcici villages. Any future house reconstruction in these villages can be connected to the network.
- 38 houses were connected to the electricity network in the six areas of Fazlagica Kula. Any future house reconstruction in these villages can be connected to the network.
- 8.5 km of high voltage network were reconstructed in Kula
- 10.8 km of low voltage network were reconstructed in Kula
- 6 step-down transformers were replaced in Kula

In the Gacko and Nevesinje municipalities, project implementation was conducted on schedule. The works were completed in the four villages – Basici, Drugovici, Hodinici, Branilovici in Gacko municipality in the month of October. In the other two hamlets – Medjulici, Stolac and in the Vrbica switchyard in Gacko municipality the works were completed at the end of December; whereas works in Nevesinje municipality were completed in December.

Location	High voltage (Km)	Low Voltage (Km)	10/0.4kV pole-mounted step-down Transformer	House connection	Switchyard
Hrusta/Borovcic, Nevesinje municipality	7	4	4	50	
Fazlagica Kula, Gacko municipality	8.5	10.8	6	38	1
Total	**15.5**	**14.8**	**10**	**88**	**1**

Implementation of Operations

IRC regularly informed USAID engineers about all the project activities. That included scope of work, bid opening information and progress of ongoing works. Good coordination with all relevant actors was essential for the successful realization and implementation of this project. IRC built excellent working relationships with relevant municipal authorities and representatives of utility company Elektrodistribucija. IRC worked in conjunction with municipality officials and representatives of the electrical utility company regarding monitoring of works and the technical acceptance of all completed infrastructure components. During implementation of project Elektrodistribucija was involved in all aspects as the institution responsible for electricity-related infrastructures. Excellent relations were established with municipal departments as well as with beneficiary representative regarding identification and confirmation of project beneficiaries, receiving of building permission for repair of power system, monitoring of works, technical acceptance of all completed infrastructure components, and the successful reintegration of project beneficiaries.

The following is a list of all Contracts made under this project:

Contract No.	Name of Company	Description of works perform under this contract	Contract value km	Start and end date of contracted works
Banja Luka (FO)				
BL 306 GA154	DOO Elbing	Repair and construction of HVN, LVN and transformer stations	742,578.70 KM	1/8/2001-28/11/2001
Bihac				
GA154/BH/01	d.o.o. "ELSE" Bihac	1. Design of project documentation for the electrical system repair in Bos. Bojna 2. Supervision and monitoring of all aspects of the project implementation	1. 9.950,00 2. 2.000,00	1. July 11, 2001-August 01,2001 2. Following the implementation until the final technical hand over, November 6, 2001
GA154/BH/02	d.o.o. "Elektrometal" Cazin	Reconstruction of power supply system in local community Bos. Bojna	405.254,38	September 11, 2001-November 6, 2001
GA154/BH/02	d.o.o.	Additional works on LV	17.300,38	October 16, 2001-

Annex	"Elektrometal" Cazin	network		November 6, 2001
GA154/BH/02 Annex 1	d.o.o. "Elektrometal" Cazin	Reconstruction of HV switchboard 20-10kV "Bojna"	121.780,40	November 14, 2001-January 7, 2002
Mostar (FO)				
MO/413/GA154	Tehnicko-Ekoloski Zavod, Banja Luka	Making of project design for Branilovici,Hodinici,Drugovici and Basici, Gacko Municipality	12,000.00	17-May-01 17-Jun-01
MO/466/GA154	Bankom Inzenjering Trebinje	Making of project design for Hrusta and Borovcici, Nevesinje Municipality	6,000.00	02-Aug-01 25-Aug-01
MO/467/GA154	Daling S.Sarajevo	Repair of electrical network in Branilovici, Hodinici, Drugovici and Basici,Gacko Municipality	337,572.41	03-Aug-01 30-Oct-01
MO/467/GA154	Daling S.Sarajevo	Repair of electrical network in Branilovici, Hodinici, Drugovici and Basici,Gacko Municipality	25,858.08	03-Aug-01 30-Oct-01
MO/488/GA154	Delta – Z Mostar	Making of project documentation for Medjulici, Stolac and switchyard Vrbica	5,400.00	06-Sep-01 26-Sep-01
MO/503/GA154	NSSN Mostar	Repair of power network in Hrusta and Borovcici, Nevesinje Municipality	231,277.74	29-Sep-01 12-Dec-01
MO/503/GA154 Annex 1	NSSN Mostar	Repair of power network in Hrusta and Borovcici, Nevesinje Municipality	34,058.30	29-Sep-01 12-Dec-01
MO/503/GA154 Annex 2	NSSN Mostar	Repair of power network in Hrusta and Borovcici, Nevesinje Municipality	66,510.10	29-Sep-01 12-Dec-01
MO/536/GA154	Daling S.Sarajevo	Repair of power network in Medjulici, Stolac and switchyard Vrbica,	272,746.46	22-Oct-01 26-Dec-01
MO/536/GA154 Annex 1	Daling S.Sarajevo	Repair of power network in Medjulici, Stolac and switchyard Vrbica	6,501.40	22-Oct-01 26-Dec-01

Banja Luka area – Kotor Varos Municipality

After signing the Contract with USAID, IRC started with the implementation of proposed activities. However, an initial assessment of the proposed area alerted IRC staff that SFOR were conducting repair works in Vranic community. In order to prevent duplication of effort IRC found an alternative solution and proposed the following interventions instead:

- 3 km of high voltage network in Hrvacani
- 0.72 km of low voltage in Dabovci and 1.2 km in Kovacevici
- 3 km of high voltage in Donje Podbrdje

The local USAID representative assessed the alternative works and a formal request was submitted to USAID Sarajevo and USAID Budapest. On July 6, 2001, USAID representatives accepted the proposed alternative site. IRC prepared the Terms of

Reference and technical project documentation. Authorized engineers, working with Elektrodistribucija, reviewed and agreed on the materials submitted by IRC.

Furthermore, IRC launched tender procedure and four local companies were invited to take the tender documentation. The tender opening procedure for project design documentation and repair works was held on July 18, 2001. All four pre-selected companies submitted offers. The firm with the lowest price and the best conditions was invited to design the project documentation and to conduct repair works. On August 1, 2001, Contract BL 306 GA 154 was signed with D.O.O. Elbing Banja Luka. The total amount of this contract was 742,578.70 KM. The following works were contracted:

1. Design of project documentation at 7,400.00 KM
2. Construction and repair of high voltage network, low voltage network and transformer stations at 735,178.70 KM

Elektrodistribucija Kotor Varos revised the project and confirmed that project documentation was done in accordance with applicable rules and regulations. In the meantime, UNHCR requested IRC to consider the connection of an additional seven houses in Dabovci and IRC considered two additional houses in Ravne of recent spontaneous returnees that had not been included in the preliminary list. IRC signed a relating annex to the contract in the amount of 13,529.70 KM.

Completion of the project was scheduled for November 1,2001. However, due to requested additional work and inclement weather in October, the contractor requested an additional 28 days to complete the works, a request approved by the IRC Engineer and Field Coordinator. Invitation for technical inspection was sent on December 3, 2001 to the USAID representative in Banja Luka, Electrodistribucija Kotor Varos, the municipality Kotor Varos and representative of DP Association, and took place on December 6, 2001. All relevant parties except donor representative attended the technical inspection and Elektrodistribucija were satisfied and expressed their gratitude for the assistance in creating and improving basic living conditions and sustainability of return.

Repair works were thus completed smoothly and outputs were as follows:

- **Hrvacani**
  - 3 km of high voltage network
  - 3.3 km of the low voltage network in Hrvacani
  - 1 transformer station
  - 76 houses connected
- **Ravne**
  - 0.4 km of the high voltage network
  - 2.9 kilometer of the low voltage network
  - 1 transformer station
  - 38 houses connected
- **Hadrovci**
  - 5.6 km of high voltage network
  - 1.8 km of low voltage network

- 1 transformer station
- 30 houses connected

- **Dabovci**
  - 1.2 km of low voltage network
  - 10 houses connected
- **Kovacevici**
  - 1.2 km of low voltage network in
  - 3 houses connected
- **Donje Podbrdje**
  - 3 km of high voltage network

Bihac area - Velika Kladusa Municipality

IRC performed the standard tender procedure for the design of project documentation. IRC requested that all firms provide offers for both preparation of project documentation and supervision of the project implementation. Companies were selected in accordance with verbal recommendation given by Elektrodistribucija Bihac. Six local companies were invited to take the tender documentation. The tender opening procedure for designing of the project documentation and consultant fees was held on June 4, 2001. Four out of six pre-selected companies submitted offers. The firm with the lowest and qualitatively best offer was invited to design the project documentation and to supervise the project implementation. On July 11, 2001 Contract GA154/BH/01 was signed with D.O.O. ELSE Bihac. The total amount of this contract was 11,950 KM. The following works were contracted:

- Design of project documentation at 9,950 KM
- Supervision of the works during the implementation of the project at 2,000 KM

Deadline for the completion of the project documentation was scheduled for July 31,2001. The designing of the project documentation was completed and submitted to IRC Bihac on August 1, 2001. The project was composed of nine segments. Elektrodistribucija Bihac revised the project on August 6, 2001. One day later the Velika Kladusa municipal commission confirmed that project documentation was done in accordance with the applicable regulations and issued the building permission, which was part of the project documentation.

The contract for the repair works was made on the basis of competitive bidding from pre-qualified contractors invited by IRC to submit official offers. IRC followed all tender guidelines governing the bidding process. Invitation for pre-qualification of companies was officially announced in the newspapers *Avaz* on June 15 and 18, 2001, and *Unsko-sanske novine* on June 15, 2001. IRC invited eligible candidates to register for the contract for the reparation of the power supply system in the Bosanska Bojna community. Seventeen companies took over the pre-qualification documentation in a set time period from June 18 to June 25, 2001. Thirteen companies submitted the registration questionnaire and other required documentation to IRC Bihac office by July 2, 2001. IRC Bihac internal Evaluation Committee carried out the selection of suitable, qualified and experienced firms with the required capacity to carry out the needed repair works. Seven

companies were placed on a shortlist for tendering and were invited to take the tender dossier. On August 15, 2001 six out of seven collected tender dossier. On the same day, IRC organized the visit on the sight. On August 27, 2001 at IRC Bihac office, IRC carried out the public opening of the tenders. Five companies submitted their offers. Donors representative as well as the representative of the appropriate municipal supervising body and utility the company Elektrodistribucija, in the presence of all bidders, were invited to attend the bid opening in order to ensure transparent procedure.

On September 11, 2001 contract GA154/BH/02 was signed with D.O.O. Elektrometal Cazin. The total amount of the contract was 405,254.38 KM. The contract period was sixty days. Annex to the contract GA154/BH/02 was signed on October 16, 2001 in the amount of 17,300.38 KM. This annex included some additional works on the LV network. IRC requested the contractor to provide a bank guarantee of 5% of contract value for the duration of execution of the contract and the duration of warranty period of twelve months, starting on the day the project is completed and technical hand-over documents accepted. These funds will be used in the case of need for reparation of any defects that may appear following the certification of completed works. If the contractor refuses to correct mistakes, IRC will utilize the bank guarantee to fund the repairs and will employ a different contracting firm. On November 6, 2001, all works on reconstruction of electrical system in Bosanska Bojna (contract Number GA154/BH/02) were successfully completed. The technical turnover of the completed works was conducted by IRC staff and outside experts skilled to evaluate completed works, with invitations extended to the donor field representative and representatives of municipal authorities. As some savings were realized under this contract IRC Bihac proposed additional works. After consultation with USAID representatives and local utility company Elektrodistribucija it was determined that the best solution for further development of power network and also the safest, considering the fact that no mine contamination existed in the proposed location, would be the reconstruction of HV switchboard RP 20-10kV BOJNA. Annex 1 to the Contract No. GA154/BH/02 was signed on November 14, 2001 in the amount of 121,780.40 KM. The period for finalizing this annex was December 21, 2001. This annex stated the following:

- Construction works on HV switchboard
- HV switchboard (equipment and installations)
- Monitoring of the works/site supervision.

The donor approved the proposed works through an annex with the contractor. On November 26, 2001 the certificate was prepared and the system handed over to the local utility company Elektrodistribucija. The project was successfully implemented and electrification of targeted areas in Bosanska Bojna and Gradina was completed as scheduled. Representatives of the municipal authorities, beneficiaries, and the local utility company Elektrodistribucija were satisfied and expressed their gratitude for assistance in creating and improving basic living conditions and sustainability of return. A small celebration ceremony was organized in the presence of the donor representatives, representatives of the municipality authorities, the Mayor of the municipality, Canton ministry officials, beneficiaries, and IRC staff.

Mostar area – Gacko and Nevesinje Municipality

In order to execute all project works six tenders were performed: three tenders for the project design and three for the rehabilitation works.

Tender 1: Project design for the reconstruction of the electrical network in the villages of Basici, Drugovici, Hodinici and Branilovici in Gacko municipality

IRC performed the standard tender procedure for the design of project documentation. Companies were selected from the IRC database for the drafting of the project design. Three local companies were invited to take the tender documentation. The tender opening procedure for designing of the project was held on May 5, 2001. All three invited companies submitted offers. The firm with the lowest and qualitatively best offer was invited to design the project documentation. On May 17, 2001 Contract MO/413/GA154 was signed with the company Tehnicko Ekoloski Zavod from Banja Luka. The total amount of this contract was 12,000.00 KM. The designing of the project documentation was completed and submitted to IRC Mostar on June 15, 2001.

Tender 2: Rehabilitation works for the villages of Basici, Drugovici, Hodinici and Branilovici in Gacko municipality

The contract for the reconstruction works was done on the basis of competitive bidding from pre-qualified contractors invited by IRC to submit official offers. IRC followed FIDIC guidelines in the performing of the bidding process. 12 companies delivered the appropriate documentation for the pre-qualification for the projects in the area of transmission and distribution of the electrical energy. On June 15, 2001 IRC Mostar's Evaluation Committee, consisting of IRC Mostar shelter team and Field Co-ordinator, carried out the pre-qualification of companies for inclusion in tender MO/GA154/01/002 for the reconstruction of electrical network in the four villages of Basici, Drugovici, Hodinici and Branilovici in Gacko municipality. Seven companies were selected: Unimont-Gacko, Daling-S.Sarajevo, Elnos-BL-Banja Luka, Elpros-S.Sarajevo, NSSN-Mostar, Zenel-Zenica and Elektromental-Cazin.

All of these companies expressed their interest for undertaking the proposed works and were selected on the basis of their previous works with IRC projects and relevant references. On June 22, 2001 the 7 pre-selected companies received the invitation to collect the tender dossier. On July 12, 2001 in IRC Mostar's office, IRC carried out the public opening of the tenders. Five out of seven invited companies were present along with IRC Mostar Commission and representatives of the appropriate municipal body and utility the company Elektro-Gacko. After the bids evaluation the Daling D.O.O.-S.Sarajevo company was selected. On August 8, 2001 Contract MO/467/GA154 was signed with Daling-D.O.O.-S.Sarajevo. The total amount of the contract was 337,572.41 KM. The works included the rehabilitation of four transformer stations, 4.2km high voltage network and 8.5 km low voltage network. The contract period was thirty-five days. Annex to the contract MO/467/GA154 was signed on October 03, 2001 for the

amount of KM 25,858.08. This Annex included some additional works on the LV network in the hamlet of Mekavci in Basici village. IRC requested contractor to provide a bank guarantee of 10% of contract value according to the regulations referenced above. On October 15, 2001, all works on the reconstruction of electrical system in the mentioned 4 villages in Fazlagica Kula were successfully completed. The technical handover of the completed works was conducted on October 30, 2001. The inauguration commission consisted of representatives of themunicipal government, IRC staff and representative of Elektro-Gacko. The commission issued the final acceptance certificate stipulating that all project works were performed according to the project design and according to the current technical standards and regulation.

Tender 3: Project design for the reconstruction of the electrical network in the villages of Medjulici and Stolac and switchyard "Vrbica" in Gacko municipality

IRC performed the standard tender procedure for the design of project documentation. Companies were selected from the IRC database for the contractors for the performing of the project design. Three local companies were invited to take the tender documentation. The tender opening procedure for designing of the project was held on August 31, 2001. All three invited companies submitted offers. The firm with the lowest and qualitatively best offer was invited to design the project documentation. On September 6, 2001 Contract MO/488/GA154 was signed with the company Delta-Z from Mostar. The total amount of this contract was 5,400.00 KM. The deadline for the completion of the project documentation was scheduled for September 26, 2001. The designing of the project documentation was completed and submitted to IRC Mostar on September 24, 2001. The project was composed of two segments for the two villages: Medjulici and Stolac. The project design for the switchyard "Vrbica" was prepared by the local electrical company Elektro-Gacko.

Tender 4: Rehabilitation works for the villages of Medjulici and Stolac and switchyard "Vrbica" in Gacko municipality

The contract for the reconstruction works was done on the basis of competitive bidding from pre-qualified contractors invited by IRC to submit official offers. IRC followed FIDIC guidelines in the performing of the bidding process. Twelve companies delivered their documentation for the pre-qualification of projects for the transmission and distribution of the electrical energy. On September 26, 2001 IRC Mostar established its internal Evaluation Committee, consisting of IRC Mostar shelter team and Field Coordinator, which carried out the pre-qualification of companies for inclusion in tender MO/GA154/01/006 for the reconstruction of electrical network in hamlets of Medjulici and Stolac and the Vrbica switchyard in Gacko municipality. Four companies were selected: Unimont-Gacko, Daling-S.Sarajevo, Eergetik-Banja Luka, and Zenel- Zenica. All of these companies expressed their interest for undertaking these works and were selected on the basis of their previous works on IRC projects and references. On October 1, 2001 the 4 pre-selected companies received the invitation to collect the tender dossier. On October 12, 2001 at IRC Mostar's office, IRC carried out the public opening of the tenders. Three out of seven invited companies were present along with IRC Mostar

Commission and representatives of the appropriate municipal body and utility the company Elektro-Gacko. After the bids evaluation the bid from the company Daling-D.O.O-S.Sarajevo was selected. On October 22, 2001 Contract MO/536/GA154 was signed with Daling-D.O.O.-S.Sarajevo. The total amount of the contract was 272,746.46 KM.

The rehabilitation works included the rehabilitation of 4.3km high voltage network, 2.3km low voltage network and 2 transformer stations. The rehabilitation works of the Vrbica switchyard included repair of the building of the switchyard, replacement of the 10kV outlet cell and underground cable and rehabilitation of the high voltage network for the supply of the Fazlagica Kula from the ring supplying side. The rehabilitation of the switchyard Vrbica was an extension of proposed works, approved by Andrew Holland, Regional Contracting/Agreement Officer RCO Budapest. This initiative was included in the project on the suggestion of the local electrical company Elektro-Gacko. The reconstruction of the Vrbica switchyard has significantly improved the safety and reliability of the power supply, primarily for the Fazlagica Kula area but also for the entire Gacko municipality. This intervention will allow reconnection to alternative electrical networks during local power outages. The contract period was forty-five days. Annex to the contract MO/536/GA154 was signed on December 14, 2001 in the amount of 6,501.40 KM. This Annex included some additional works on high voltage network in the hamlet of Medjulici. IRC requested contractor to provide a bank guarantee of 10% of contract value according to its standard procedure. On December 20, 2001, all works on reconstruction of electrical system in the 2 villages in Fazlagica Kula were successfully completed. The technical handover of the completed works was conducted on December 26, 2001 by IRC staff and outside experts skilled to evaluate the completed works. The commission issued the final acceptance certificate stipulating that all project works have been done according project design and according to the current technical standards and regulations.

Tender 5: Project design for the reconstruction of the electrical network in the villages of Hrusta and Borovcici in Nevesinje municipality

IRC performed the standard tender procedure for the design of project documentation. Companies were selected from the IRC database for the contractors for the performing of the project design. Three local companies were invited to take the tender documentation. The tender opening procedure for designing of the project was held on July 23, 2001. All three invited companies submitted offers. The firm with the lowest and qualitatively best offer was invited to design the project documentation. On August 2, 2001 the Contract MO/466/GA154 was signed with the company Bankon Inzenjeing from Trebinje. The total amount of this contract was 6,000.00 KM. The deadline for the completion of the project documentation was scheduled for August 25, 2001. The designing of the project documentation was completed and submitted to IRC Mostar on August 20, 2001. The project was composed of four segments for the four transformer areas in the villages Hrusta and Borovcici in Nevesinje municipality.

Tender 6: Rehabilitation works for the villages of Hrusta and Borovcici in Nevesinje municipality

The contract for the reconstruction works was done on the basis of competitive bidding from pre-qualified contractors invited by IRC to submit official offers. IRC followed FIDIC guidelines for the bidding process. Twelve companies delivered their documentation for the pre-qualification of the projects for the transmission and distribution of the electrical energy. On August 27, 2001 IRC Mostar established its internal Evaluation Committee, consisting of IRC Mostar shelter team and Field Coordinator, which carried out the pre-qualification of companies for inclusion in tender NO. MO/GA154/01/004 for the reconstruction of electrical network in the two villages of Hrusta and Borovcici in Nevesinje municipality. Five companies were selected: Elnos - BL- Banja Luka, Elpros-S.Sarajevo, NSSN-Mostar and Zenel-Zenica. All of these companies expressed their interest for undertaking these works and were selected on the basis of their previous works on IRC projects and references. On August 29, 2001 the 5 pre-selected companies received the invitation to collect the tender dossier. On September 13, 2001 at IRC Mostar's office, IRC carried out the public opening of the tenders. Four out of seven invited companies were present along with IRC Mostar Commission and representatives of the appropriate municipal body and utility the company Elektro-Nevesinje. After the bids evaluation the NSSN company from Mostar was selected. On September 26, 2001 Contract Number MO/503/GA154 was signed with NSSN Mostar. The total amount of the contract was KM 231,277.74. The contract period was thirty-five days. Annex I to the contract MO/503/GA154 was signed on November 8, 2001 in the amount of 34,058.30 KM. Annex II to the contract MO/503/GA154 was signed on November 20, 2001 in the amount of 66,510.10 KM. These Annexes included additional works on high voltage line Nevesinje- Hrusta - Borovcici. The rehabilitation works included the rehabilitation of 7km high voltage network, out of which 1.5km are branches to the villages and the 5.5km line is the main high voltage line Nevesinje-Hrusta-Borovcici, 4km low voltage network and 4 transformer stations. The rehabilitation of 5.5km high voltage is an addition to the originally planed works. The high voltage line from Nevesinje-Hrusta-Borovcici was approximately 20 km long and 40 years old. The line was not maintained during the last 10 years and was crumbling. Market forces pushed the prices of the electrical material down enabling IRC to rehabilitate this high voltage network. This initiative improved the safety and quality of the power supply for Hrusta and Borovcic and also for the other villages in the surrounding area (i.e. Luka and Presjeka). IRC requested from the contractor to provide a bank guarantee of 10% of contract value according to standard procedure. On December 5, 2001, all reconstruction works of electrical systems in the 4 villages in Fazlagica Kula were successfully completed. The technical turnover of the completed works was conducted on December 12, 2001. Municipal government representatives, IRC staff and a representative of Elektro-Nevesinje attended the official inauguration. The commission issued the final acceptance certificate stipulating that all project works were completed according to the project design and technical standards and regulations.

Tender 7: Provision of Equipment for Education , Nevesinje

IRC performed the standard tender procedure for the provision of the educational equipment for the local electrical company Electro-Nevesinje. Companies were selected from the IRC database for contracts for the provision material and equipment. Three local companies were invited to take the tender documentation. The tender opening procedure for provision of the educational equipment was held on December 7, 2001. All three invited companies submitted offers. The firm with the lowest and qualitatively best offer was invited to provide this equipment. On December 19, 2001 Contract MO/595/GA154 was signed with the company ZMT from Mostar. The total amount of this contract was 6,355.00 KM. The education equipment, two computers, copy machine, one color printer and three table calculators were delivered and handed over to the Elektro-Nevesinje on December 21, 2001 with all appropriate documents.

Tender 8: Provision of Equipment for education, Gacko

IRC performed the standard tender procedure for the provision of the educational equipment for local electrical company Electro-Gacko. Companies were selected from the IRC database for contracts for the provision material and equipment. Three local companies were invited to take the tender documentation. The tender opening procedure for provision of the education equipment was held on December 12, 2001. All three invited companies submitted offers. The firm with the lowest and qualitatively best offer was invited to provide this equipment. On December 14, 2001 Contract MO/596/GA154 was signed with the company Elektron Commerce from Mostar. The total amount of this contract was 6,475.66 KM. The deadline for the delivery of the equipment was set for 15 days upon signing of the contract. The education equipment, universal instruments to measure of the resistance (1), universal instrument AV (2) and voltage tester (1) were delivered and handed over to the Elektro-Gacko on December 27, 2001.

Problems Encountered and Corrective Procedures

Banja Luka area – Kotor Varos Municipality

The only constraint the IRC Banja Luka Team faced was the change of proposed location. The village Vranic was originally proposed by IRC and supported by the RRTF. Therefore, upon signing the Contract with USAID, IRC Engineers began with preparatory works for project implementation. However, during site visits IRC staff found out that SFOR troops had already begun some repair work on electrical system in village Vranic. There was an obvious lack of coordination between RRTF and SFOR. Thanks to close cooperation of IRC with other NGOs (American Refugee Council and Dutch Relief Agency), RRTF, and local bodies, IRC succeeded to solve the encountered problem giving an alternative option that caused no increase of the originally proposed budget. Thus, IRC proposed new locations in the villages Dabovci, Kovacevici and Donje Podbrdje. ARC and DRA reconstructed significant number of houses in these villages. IRC's intervention brought about a significant improvement of living conditions for those families who have returned into their reconstructed homes and future returnees.

Mine contamination in Bihac and Mostar

IRC Bosnia has developed considerable experience in complex return programs under difficult conditions, including mine contamination. In places where the possibility of mine contamination exists, IRC works with community and beneficiary representatives and with the Civil Defense authorities. IRC, whenever possible, tried to stick with proposed areas of work. However, where the mine contamination posed a high degree of risk to staff, workers and the population the appropriate authorities were called in to clear the area. Nevertheless, due to time constrains by the de-mining teams and time limitations some projected works could not be implemented as planned. As a result alternative locations where presented to the relevant authorities and to the donor in order to fulfill the contractual requirements and commitment to the beneficiaries.

Bihac area - Velika Kladusa Municipality

On March 19, 2001 IRC requested a mine survey report from the Federal Mine Action Center. After a general survey of specified areas MAC survey team identified three suspected areas.

MAC prepared two projects for mine clearing in two suspected areas in Bosanska Bojna:
1. Project for location "DV Vrnograc-Bosanska Bojna" covering area of 3,843 m^2
2. Project for location "DV 20(10) kV TS Vrnograc-RP Bojna 1" covering area of 1,146 m^2.

IRC contacted agencies qualified and experienced in mine cleaning and cooperation was built with HO APM Bihac, which showed interest in mine clearing in the two suspected areas. APM started with the de-mining process in April 2001 and completed all works in October 2001. On June 29, 2001 HO APM Bihac handed over the first completely cleared area from mines, and on August 23 the second area. Because of misunderstandings during measuring of the area on the field, 160 m^2 left from the second area were not cleared. FMAC prepared the additional project for de-mining of these 160 m^2, and de-mining on second suspected area was finished in October 2001. Mine/UXO clearance tasks were executed in accordance with a Humanitarian Demining Standards that provide 99.6% safety for the ultimate users.

Mostar area – Gacko and Nevesinje Municipality

The main problem that IRC faced in Mostar was the mine situation in the Fazlagica Kula area. Since June 2000 three mine incidents were recorded in the Fazlagica Kula area. As IRC was implementing three projects in the area (reconstruction of 24 houses and water chambers, primary school reconstruction and power supply system), it was taking the mine contamination situation very seriously. IRC has taken a very active role together with OHR/RRTF, SFOR, UNHCR, MAC and Civil Protection RS in order to come up with comprehensive solutions for this problem. As noted in quarterly reports the incidents occurred on October16, 2000, December 15, and May 7, 2001, resulting in loss of life and severe injuries. IRC organized a joint meeting at IRC's Mostar office on May 29 and invited local representatives from OHR, UNHCR, SFOR, Civil Defense RS, MAC RS,

FAS Mostar and DP Gacko Association. The following points were the most important conclusions reached at the meeting:

- IRC provided MAC and CP with priority list of locations to be checked in Kula.
- CP RS started with de-mining activities on June 2001.
- SFOR established an additional observation station on the way from Muhovici to Basici and provided non-stop control of the area and continued to provide the security environment in Kula required for successful and safe return of displaced persons and refugees to the village.

During the implementation period, MAC completed its survey for all the access roads, house locations and water chamber, as well as for the power supply routes. The reports were submitted to IRC in June and July 2001. Considering that a significant amount of land including access roads and low voltage network routes were declared "risky," and de-mining was difficult in this area, IRC requested HELP on 25 June 2001 to send more de-mining groups to the site so that project implementation would not be delayed. IRC has constantly informed OHR/RRTF representatives about these activities and received their full support. In addition, IRC requested that MAC provide a safety certificate in order to facilitate the signing of the contract with the building company for the housing component. Upon MAC's refusal to provide such a certificate IRC decided to use alternative access roads to the villages. All the contractors were informed about MAC's de-mining survey. The Civil Protection de-mining groups have checked and cleaned in the depth of 20 cm the access road, house locations and low voltage network routes in the villages of Drugovici and parts of Basici. The work on the power network reconstruction was performed on all locations with no other notable problems.

Initial Evaluation and Conclusion

By way of this project, IRC was able to rehabilitate 34.19 km of high-voltage electrical network (6.79 km more than expected) and 35,84 km of low-voltage electrical network (2.54 km more than expected). IRC provided direct house connections for the 296 beneficiary families, 58 more than anticipated in the proposal. Moreover, seventeen 10/0.4kV pole-mounted step-down transformers were built or rehabilitated. A new substation was installed in the main transformer station in Gacko and reconstruction of a HV switchboard RP 20-10kV in Bojna. Furthermore, this project helped thousands of people in the area through the rehabilitated electrical networks by providing a more reliable source of energy and improving the safety of the infrastructure.

This project maximized the impact of previous, ongoing and future return and reconstruction projects by providing complementary infrastructure rehabilitation. The integrated approach resulted in higher rates of actual and sustainable return by addressing a range of basic needs. An initial estimate of the return rates in areas where this project was implemented versus areas where similar interventions where not available shows that return rates are on average 5-20% higher. Clearly not all of this increase can be attributed to this intervention, and this can not be considered a control study as locations are

different and economic conditions and the political environment differ; nevertheless, IRC strongly believes that without the implementation of this project return rates would have been uniformly lower across different projects. IRC field staff expressed that anywhere from 20% to 70% of the higher return can be directly attributed to this initiative.