

Curriculum vitae

Phone: (+47) 909 44 233, E-mail: einar@sofienlund.org

TYPE OF EXPERTISE: Electric power engineering



- (1) **Family name:** Sofienlund
- (2) **First names:** Einar
- (3) **Date of birth:** 01/06/1958
- (4) **Passport holder of:** Norway
- (5) **Education:**

| Institution | Degree(s) or Diploma(s) obtained: |
|---|--|
| State College of Engineering (GIH), Gjøvik, Norway (1980) | B.Sc. Electrical Engineer, majoring in electric power and high-voltage engineering |
| Norwegian Institute of Technology (NTH), Trondheim, Norway (1991) | Basic, Technical and Socio-Economical Analysis |
| Norwegian Institute of Technology (NTH), Trondheim, Norway (1992) | Engineering Geology and Rock Mechanics for Hydropower Engineers |
| Norwegian Institute of Technology (NTH), Trondheim, Norway (1994) | Degree Professional Development Certificate (PDC) |
| Norwegian Institute of Technology (NTH), Trondheim, Norway (1994) | Engineering Hydrology for Hydropower Engineers |
| University of Business Administration (BI) (2002) | Contract Management |

(6) **Language skills:** Indicate competence on a scale of 1 to 5 (1 - excellent; 5 - basic)

| Language | Reading | Speaking | Writing |
|-----------|---------------|---------------|---------------|
| Norwegian | Mother tongue | Mother tongue | Mother tongue |
| English | 1 | 1 | 1 |
| German | 3 | 3 | 3 |
| French | 5 | 5 | 5 |
| Spanish | 5 | 5 | 5 |

(7) **Other training:**

| Year | Course | Duration |
|------|--|---------------|
| 1983 | Remote grid control systems for power networks (ABB and Siemens) | |
| 1985 | Presentation technique related to communication (NEBB) | |
| 1986 | Design of substations (Norwegian Society of Engineers) | |
| 2016 | Dam safety I | 1 week |
| 2018 | Dam safety III | 2 days |
| 2018 | VTA-responsible class 1 | certification |

(8) **Membership of professional bodies:**

Norwegian Association of Chartered Engineers (NIF – Tekna)

(9) Key qualifications:

Engaged within the field of electric power engineering throughout professional career with emphasis on planning, design and project management of power systems and hydro power plants. Project work includes project management, feasibility studies, cost estimates, conceptual design, detail design, co-ordination, cost control and finance of power projects. Project works also includes preparation of tender documents, tendering, tender evaluations, contract negotiations and signing. Extensive experience of project implementation and co-ordination as the Engineer according to FIDIC's definition with all aspects like preparation of time schedules, progress and cost mitigation and control towards budget and plans including reporting, site inspections and supervision of installations, commissioning including training and education of operating staff. Evaluation of least cost technical solutions for generating plants transmission systems and distribution systems.

(10) Positions:

1980-1989 Norwegian Electric & Brown Boveri (NEBB now ABB).

Design Engineer and project manager for several sizable hydropower projects in Norway, such as Sima 1200 MW, Aurland II 70 MW, Tjodan 110 MW, Naddvik 112 MW etc.

1989 – 2005 Norconsult AS, Consulting services for international projects.

Project manager with overall responsibility for screening and feasibility studies, procurement, tendering, evaluations and contract negotiations, Construction and supervision of energy projects worldwide. Specific projects of interest may be mentioned: Buksefjorden Hydropower in Greenland, Pangué Hydropower in Chile, Kidatu hydropower in Tanzania, Pequenos Libombos Hydropower in Mozambique, Ubungo gas turbines in Tanzania, Janopol hydropower in Philippines, 3 small hydropower projects in Pakistan, etc.

2005 – 2011 Einar Sofienlund ENK Independent consultant

Developer of self-owned and other projects in Norway, ranging from 50 – 10 000 kW. Services rendered comprises all stages of development from project screening, concept design, licence applications, detail design, financing, tendering, contract evaluations and negotiations, engineering, construction supervision, commissioning and project operations.

2011–present Norsk Kraft AS

Senior engineer responsible for overall project evaluations with respect to production simulations and development costs including conceptual design for a large number of projects ranging from 1 MW to 30 MW.

The independent part comprised development and construction of own small hydropower projects like Kjærnes 1000kW, Eidsland 1&2 1150kW, Nottveit 5500 kW, Segadal 3500kW, Vesla 3500kW, Kaldåga 1000kW etc.

(11) Country working experience:

Benin, Bosnia and Herzegovina, Central African Republic, Chile, Eastern Timor, Finland, Guatemala, Korea (DPRC), Kyrgyzstan, Malawi, Mozambique, Norway, Pakistan, Philippines, Sri Lanka, Tanzania, Uganda and Zambia

CV of Einar Sofienlund

(11) Professional experience (selected):

| Date from - to | Location | Company & reference person | Position | Description |
|-----------------------|------------------------|--|----------------------------|--|
| 1995 – 2005 | Tanzania | TANESCO, Mr. BEAT Luhanga | Team leader | Total rehabilitation of a 200 MW hydropower project with 4 units |
| 2003 – 2004 | Mozambique | Administracao Regional de Aguas, ARA-Sul | Team leader | Completion works of a hydropower plant |
| 2000 – 2002 | Zambia-Tanzania | 66 kV Mbala – Sumbawanga. Mr. M.M. Fazal | Team leader | 125 km interconnector powerline from Zambia to Tanzania |
| 2001 – 2002 | Bosnia and Herzegovina | Bocac Hydropower Ltd | Team leader | Rehabilitation of the plant after the war actions during the 90's |
| 2000 -2001 | Tanzania | TANECO, Mr. BEAT Luhanga | Team leader | Bahari Beach substation, Planning, tendering, contracting and construction of a 33/11kv substation |
| 1999 | Uganda | Uganda Electricity Board UEB, Mr Henry Bidasala | Electrical engineer | Review of NORAD's engagements in Uganda |
| 1999 - 2002 | Malawi | ESCOM, | Team leader | Lilongwe distribution reinforcement |
| 1997 | Bosnia and Herzegovina | International Finance Company (IFC), Mr. Garth Headly | Senior electrical engineer | Feasibility study for re-establishment of the high voltage manufacturing facilities in Sarajevo |
| 1993 – 1997 | Chile | Empresa Electrica en Panguel SA | Project engineer | Responsible for programming and planning for the logistics of constructing the hydropower plant including frequent reporting. |
| 1993 | Tanzania | TANESCO, Mr. Baldwin Msoyo | Electrical engineer | Dar es Salaam gas turbine project |
| 1992 – 1993 | Central America | Consejo de Electrification America Central (CEAC) | Asst. Team leader | Project co-ordinator for a broad range of sub-projects in order to improve the cooperation between the Central-American countries. |
| 1990 – 1993 | Greenland | Greenland Energy Board | Team member | Buksefjorden NUUK hydro-electric plant, responsible for QA/QC etc. |
| 1990 – 1992 | Philippines | National Electricity Authority (NEA), Mr. | Electrical engineer | Construction of Janopol hydropower project . |