HISTORY

1917–1962

1917: Osa Fossekompani AS began construction in Osa, but the work was suspended after 8 years.

1962: Statskraftverkene began planning.

1968–1980

1968: Application for building permission was submitted.

1973: In 1973, The Norwegian Parliament gave its approval for construction and work to commence on a reduced scale.

1977: At its' peak, there were 1200 persons working on the project.

1980: Sima power station was opened.

1997–2004

1997: Statkraft took over operation of the Bjølvo Power station.

2004: The new Bjølvo Power Station came into operation.

SOME TECHNICAL INFORMATION

Area of operation	Location	Power station/ Pumping station	Number of aggregates	Effect (MW)	Average production (GWh / year)	Share of ownership by Statkraft (%)	Entered into operation
Eidfjord	Eidfjord	Sy-Sima	2	620	1640	65	1980
		Lang-Sima	2	500	1088	65	1980
	Ålvik	Bjølvo	2	100	387	100	2004
Total Eidfjord			6	1220	3115		

CREATING VALUE

Statkraft is Norway's largest land-based taxpayer. Our production activities generate significant wealth, which is returned to society through dividends, taxes and other public liens and charges. Statkraft also contributes actively to Norwegian society, providing financial support to sports & athletics, culture and other activities and good causes. Our social engagement is organised under the auspices of local clubs and associations and in close cooperation with the local authorities who host Statkraft's activities.

THE SOURCE

Hydroelectric power is clean and renewable – and is actually a form of solar power. Water that evaporates due to solar energy returns in the form of precipitation. Rivers and waterfalls are used for the production of power, and large dams store the water for later use.

Thanks to hydroelectric power, we need not base our supply of electricity on fossil fuels or nuclear power, as many other countries do. Norway is like an island of clean and renewable hydroelectric power in Northern-Europe.

Our country is built, literally speaking, by hydroelectric power. Our economic growth and progress corresponded closely with the building of power stations. Electricity was the most important production factor in the industrialization of Norway, which freed our country from being a poor and underdeveloped place on the outskirts of Europe. The great change took place after 1850, and gathered speed after the dissolution of the union in 1905 when Norway once again became an independent nation. Electricity was an important part of the foundation for the enormous economic growth which occurred, and at the same time, in the course of a half century, it would completely transform Norwegian homes. The wood-fired stoves with cooking plates in the kitchen and oil lamps were thrown out for good and replaced with electric stoves, panel heaters, lamps, electrical appliances and computers.

11/07 no

Statkraft

EIDFJORD

REGULATION

Eidfjord is a rural district in the Hardangerfjord with approximately 1000 inhabitants. It is surrounded by mighty mountains and beautiful valleys, in the bottom of one of these valleys, Simadalen, we find Sima Kraftverk [Power station]. There lies the administration, power station, fish hatchery and gene bank.

The area of regulation is divided in two, Lang-Sima and Sy-Sima. Water from both of these areas runs down to Sima power station 700 m inside the mountain, where there are 2 aggregates for each area.

Statkraft owns 65% of Sima Kraftverk, the remaining ownership is divided between Bergenhalvøens Kommunale Kraftselskap with 26.25% and Sunnhordland Kraftlag with 8.75%.

Production control, planning and monitoring of the power station takes place from the operation centre in Sauda approximately 100 km from Eidfjord.

VISITING THE POWER STATION

Sima kraftverk is one of five regional centres of information owned by Statkraft. There are exhibitions here and movies are shown here, as well as multi-visual programmes in addition to guided tours of the power station.

From the middle of June to the middle of August there are daily tours at 10.00, 12.00 and 14.00. In July there is a tour at 15.30. It is possible to book tours at other times with prior agreement.
Contact Eidfjord Tourist Office on:
Tel. 53 67 34 00.

FISH HATCHERY AND GENE BANK

The generation of power can cause changes to the water and water course, so that the salmon and trout have problems with reproduction. Statkraft is instructed to ensure that fish are introduced back into these areas in order to combat such damage. This has become a rather large task, and Statkraft has therefore constructed several hatchery facilities around the country, as well as shares in jointly owned facilities. At Sima power station there is a modern facility in operation, and each year it produces approximately 100 000 fry (salmon and sea trout young that are ready to be released into the sea) and an additional approximately 150 000 hatchery mountain trout.

Statkraft continually seeks to improve the natural environment for the fish in the watercourses, and carries out different biotope adjusting activities in many water courses. Statkraft also operates a gene bank for The Directorate for Nature Management. Here they take care of living salmon from the counties of Hordaland and Sogn og Fjordane.

DAMS

There are many small and large dams in the regulation area. The largest are, Rundavatn, Rembesdalsvatn and Sysenvatn, these dams are all rock-fill dams.

Vøringsfossen:
In the regulation area lies the Vøringsfoss which is one of Norway's most visited tourist attractions. In the tourist season from 1st of June to 15th of September, the Vøringsfossen has a minimum flow rate of no less than 12 m3 per second. The waterfall cascades over the edge of the mountain, 183 m down to the bottom of the valley, and ends in a narrow ravine. This ravine is a magnificent and dramatic sight.

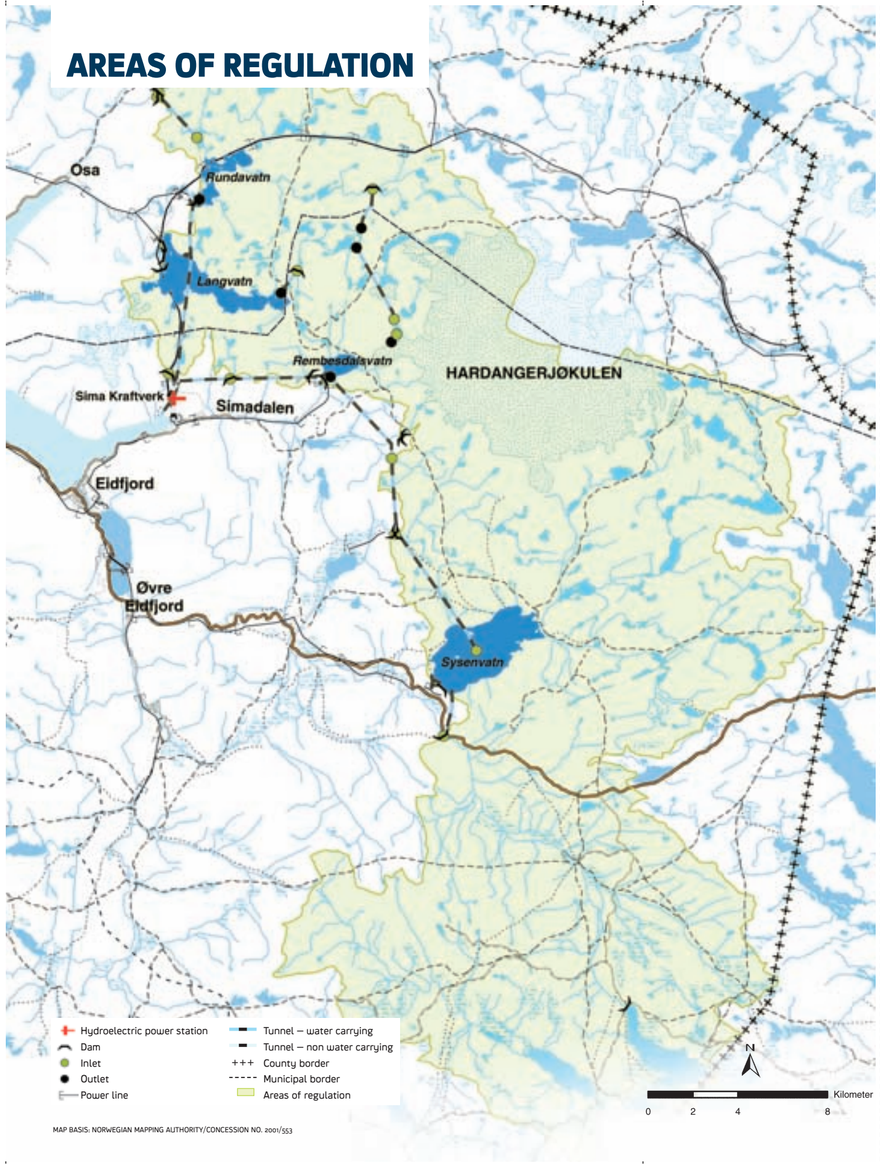
Bjølvo:
In 1997, Statkraft Bjølvo took over operation of the power plant in Ålvik from Bjølvefossen ASA. Operations were organised under station group Eidfjord. The reason for this was that the supervisory authorities decided in 1993 that the forge welded pressure pipes should be taken out of service within a certain deadline. So many changes were required that Bjølvefossen and Statkraft agreed that Statkraft could take over the power station before 2007.

Statkraft applied for and was granted the concession for construction of the new Bjølvo power station in 2000. The new power station is built inside the mountain, and has an annual production of 387 GWh.

SIMA POWER STATION

SIMA POWER STATION.

AREAS OF REGULATION



MAP BASIS: NORWEGIAN MAPPING AUTHORITY/CONCESSION NO. 2001/553

THE SYSENDAMMEN.

NATURE AND THE ENVIRONMENT

Recent power development schemes take into account environmental and landscaping requirements at a much earlier stage in planning than was the case for developments in previous years. Through a considerable effort in research and development, we also continuously implement measures during and after development to ensure that nature and the environment will be disturbed and affected to the least possible degree.

In order to improve conditions for fish in regulated watercourses, we try various measures. In some cases these are combined with the setting out of fry and juvenile fish.

The construction of thresholds, planting and seeding are also done on a large scale. Wherever there is a need, tidying up after previous developments is done.

BIOTOPE ADJUSTING ACTIVITIES IN SIMO.