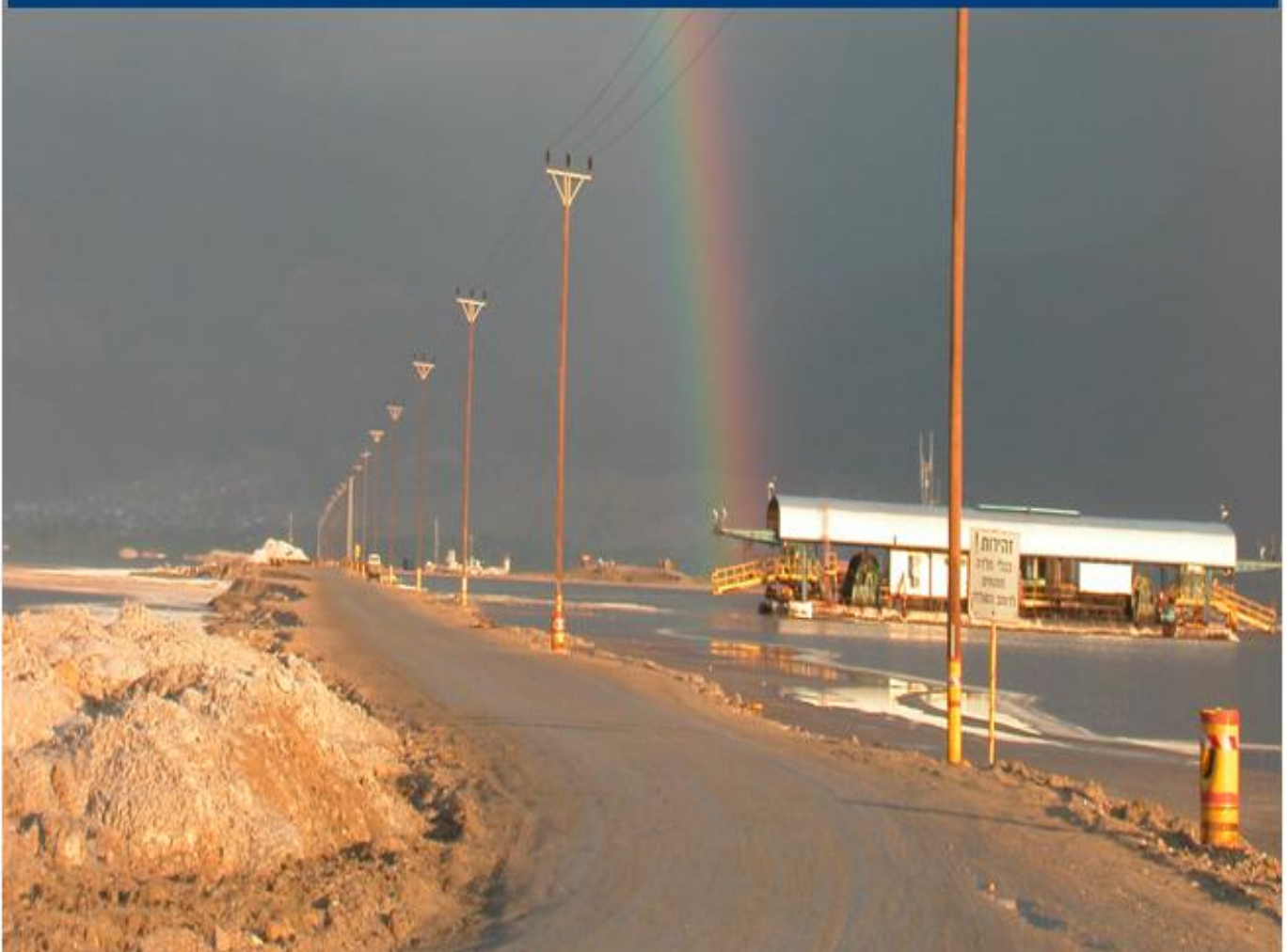


Dead Sea Works

A New Power Station Project

Environmental Statement | Non Technical Summary



Dead Sea Works new Power Plant: *Environmental Statement / Non Technical Summary*

Introduction

Dead Sea Works steam and electricity demand has grown during last decade and will continue to grow in the coming years. Dead Sea Works intends to construct a new gas fired co-generation power plant consisting of a Gas Turbine, Heat Recovery Steam Generator boiler and a Steam Turbine. The new power plant will have a capacity of 220 MWh and 330 ton per hour low pressure steam.

The power plant will be located inside the Dead Sea Works industrial site at Sdom.

Environmental impact statement

The environmental impact survey has been prepared in order to provide information to authorities and to the public on a possible impact of the proposed power plant, to estimate the improvement of air quality in the region by replacing the existing electricity generation technology based on diesel engines by the proposed new and cleaner technology and to summarize an Environmental Impact Statement (EIS).

This EIS has been prepared in accordance with the relevant issues set out by the Environment Protection Ministry.

Noise and Vibration

Noise limits are 70 dB by daytime and 45dB at night .these according to the Israeli regulations act 5288 "Noise preventing 1990"

Since the nearest neighborhood located more than 11 km south of the industrial site there is no impact on the neighborhood, but the conclusions also noted that the additional power plant noise increased the dB to cause annoyance and disturbance to the workers at distance less of 100 m. In order to protect workers and to decrease noise level, the installation of attenuators and acoustic louvers is required in selected noisy facilities.

Noise survey is needed after the construction to insure that the project achieve the required noise limit levels according to the regulations.

Air quality and climate

The power plant will use natural gas which is very efficient in terms of carbon dioxide per MW electricity production so the increased power production capacity (by appr. 100 MWh compared with the existing capacity) will not affect significantly the locale climate compared with the current fuel oil fired plant.

The proposed plant uses a BAT in order to meet the local and the European Emission standards.

In case of emergency (as defined by the Ministry of Industry and Energy), the power plant is designed to switch to firing Light Fuel Oil and to meet the environmental standards even under the described scenario. The impact on the local air quality is very small and much better than the present situation.

Wastewater, soil geology and groundwater

Groundwater flow in the area via underground channels to the Arava wadi.

It is therefore necessary to prevent any spillage of fuels or other materials that will eventually find their way to the sea. Based on Corporate policy and led by the Project Management, a minimum of emissions and effluents was embedded into the design. Only clean solutions would be fed into the evaporation ponds of the Dead Sea Works. Wastewater containing fuels or lubricants will be transferred to treatment plants authorized by Environmental Protection Ministry.

Moreover, the existing Dead Sea Works wastewater treatment systems

operated under design capacity so it could absorb a part of the effluents of the new power plant in order to come close to zero discharge. Taking these steps, planners did not predict any negative impact on the groundwater, soil, and of course on the Dead Sea itself.

Monitoring and emission control

The emission control is based on three major elements:

1. Daily sampling of the liquid flows and wastewater, analyzing those samples and reacting accordingly to the lab results.
2. Online monitoring of the flue gas coming out of the power plants chimney stack.
3. Three monitoring stations located at three critical points in the region constantly measuring the level of pollutant material. Thus, insuring that the pollution rates will not exceed the ambient standard required under the "clean air act".

Landscape and visual impact

The landscape character of the site in Sdom is already pre-defined by the existing mineral production industry facilities, Such as the potash production plants and the magnesium factory. The proposed project will assimilate itself within the existing landscape without creating major alterations. For example the highest chimney stack will rise to the approximate height of 60 meters above ground level which is at the same height of current constructions. Moreover, it is well known that pipelines cause a significant alteration to the visual perception of the landscape. The supply of gas and water to the new plant will be based on the already existing pipe racks. The entire new, high pressure gas pipe will be underground. Water supply will be delivered from currently used wells in the region relying on the existing network piping. Furthermore, during the design process landscape architects will be consulted in order to minimize any impact to the landscape. By properly planning the

plant's layout and designing an esthetic painting and plantation program we will be able to ensure the power plant integrates with the landscape

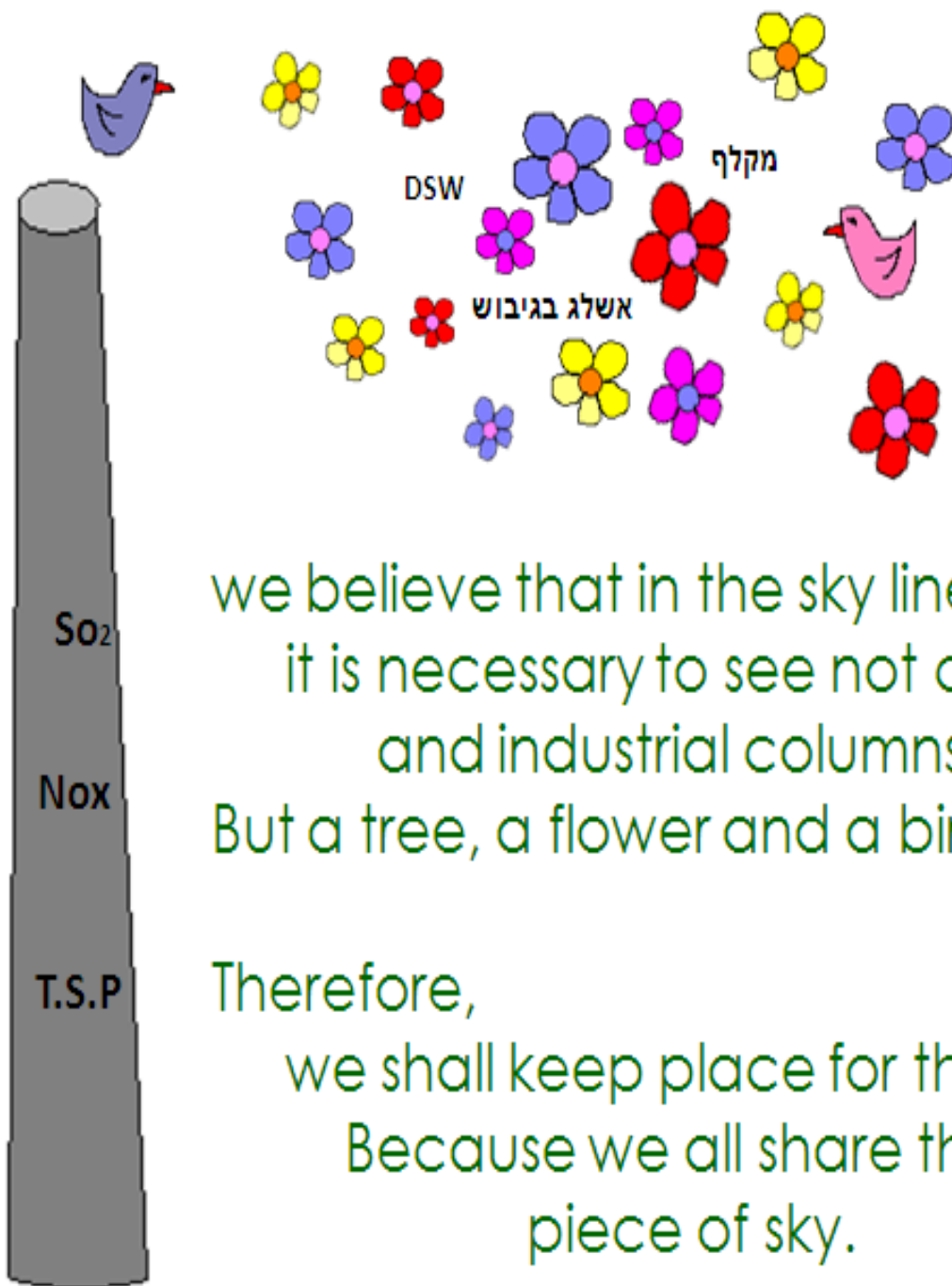
Sustainability

The power plant has been evaluated with reference to two themes, environmental and economic.

The project is up to code and meets the sustainability requirements.

The new power plant's impact on the environment will be minimized by controlling the emissions and by maintaining the highest possible efficiency levels of steam and energy production. Furthermore, it was decided to reuse the exiting production site instead of developing a new one thus, protecting the land reserves in the region.

The economic impact of this development will have positive results. It will help to secure power capacity and supply to all industrial facilities in the Sdom industrial area. This enables us to maintain a considerable level of independency in our consumption of power and steam without relying solely on the national power grid as a single supplier.



we believe that in the sky line,
it is necessary to see not chimneys
and industrial columns only,
But a tree, a flower and a bird as well.

Therefore,
we shall keep place for them,
Because we all share the same
piece of sky.