

Putting Power Stations where they Belong

THE row about the siting of a new electricity generating station for New York, settled by one of Mr John Lindsay's characteristic compromises (see page 992), is more than a local squabble or even a special feature of what remains the most remarkable of all cities. In one way or another, most modern cities find themselves hard pressed to know just how to keep themselves supplied with electricity. In many places—London is all too obvious an example—the solution has been to build generating plants as close as possible to the points at which the electricity is consumed. The result has been either disfigurement or needless air pollution or a combination of both. It follows that there should be a deliberate attempt to isolate the lessons that can be learned from the maladroit scheme for the building of the Astoria power plant in New York, for even if the mayor has for the time being made sure that the Astoria plant will be the last in New York to burn fossil fuel, his writ does not run elsewhere.

The lack of forward planning is perhaps the most obvious and the most serious defect of the scheme which is now to be half implemented, and it is only fair to say that the utility company, Consolidated Edison, is not entirely to blame. For several years the company has been hindered in its schemes for building power stations for New York by considerations for the quality of the environment. In the early sixties, for example, the company was prevented from building a nuclear power station more or less across the river from the United Nations headquarters and even if, now as then, the company seems to have been foolishly willing to mix technology and people's living spaces, its arguments about the urgent need of generating capacity have been plain enough. The prospect earlier this summer that there would not be enough generating capacity to keep the air conditioning sets in operation, which happily has not materialized, has been a powerful reminder that cities are unworkable without electricity, and that it is necessary to plan for future growth three or even five years ahead. So much everybody will concede.

But is it necessary to meet the growth of a city's need of electricity by building power stations on the spot? This is the most constructive of the questions raised in the protest about the Astoria power station in the past few weeks. The answer, of course, is that there is no technical reason why a city even as large as New York should not be supplied with electricity generated at a remote site. To be sure, the cost of transporting electricity over distances of the order of some hundreds of miles is not negligible, especially when the alternatives are power station sites that can be supplied cheaply with fossil fuels by sea or river; yet the cost is at the same time not outrageous. In the United States, where the interconnexion of the electricity generating systems is not nearly as well developed as in Europe and where

the economic advantages of interlinked capacity have not been exploited to the full, it would be surprising if the real extra cost of building power stations away from cities were as much as an extra 10 per cent. The way in which many utility companies plan to make money by generating electricity at remote nuclear installations is a sufficient proof that distance need not be an insuperable obstacle. In this sense, Mr Lindsay is entirely right to have insisted, in his agreement with Consolidated Edison, that the local utility should develop its distant connexions. That is a step that other city authorities could usefully take.

It is entirely within the bounds of possibility that the demand for electricity in a city such as New York could be substantially reduced by proper design. The question has received no attention worth speaking of, but the point has probably now been reached at which buildings might be designed to be kept comparatively cool in summer without making such a large demand on the air conditioning supplies. Instead of throwing up their hands in horror at the condition of the modern city, people should pay some attention to problems like these.

100 Years Ago



NOTES

A WEEK or two ago we announced a rumour to the effect that the Government had refused to allow a ship to convey the eclipse observers to Spain and Sicily next December. The rumour was too well founded; the Government has actually refused to tell off a ship for this purpose. This decision in the teeth of the plainest precedents requires no comment on our part; in fact, it is beyond all comment, it is astounding. We are enabled to announce, however, that the American Government, more enlightened than our own, are making extensive preparations; and upon the results of their labours and those of the Continental Governments Englishmen must therefore fall back, in a research which is eminently English. The Americans will send three corps of observation, to be stationed respectively at Malaga, Sicily, and some place in Turkey most available for making the best scientific records and views. One of these corps will be sent from the Naval Observatory, and the other two will be composed of the most scientific men in the country, including the professors from Harvard University. Before the war broke out it was arranged that Rear-Admiral Glisson should extend to the corps at Sicily all the aid and co-operation in his power. But the original plan has been spoiled for the present by the troubles in Europe, Admiral Glisson being obliged to move his squadron to the Baltic for the protection of American commerce in that vicinity.

From Nature, 2, 379, September 8, 1870.