

DOCKET NUMBER 50, 52 & 100
PROPOSED RULE 57FR47802



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Direzione Centrale Sicurezza Nucleare
e Protezione Sanitaria
Il Direttore

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Roma, 24 MAR. 1993

Prot. n. 3160

Secretary
U.S. Nuclear Regulatory
Commission
Washington, DC 20555

Attention: Docketing and Service Branch

Subject: Proposed rulemaking 10CFR Parts 50, 52 and 100, "Reactor Siting Criteria" (Federal Register Vol. 57, No 203 - October 20, 1992).

Dear Sirs,

Referring to the proposed rules in the subject, I'm pleased to provide you with the attached ENEA-DISP comments.

Sincerely yours

Giovanni Naschi
Giovanni Naschi

Encl. 1

9303310050 930324
PDR PR
50 57FR47802 PDR

ENEA
Via Vittorino Brancaccio
00144 Roma
Tel. 06/5213476
Telex 312107 ENEL I

ENEA
Emis per la Nucleo Technologie
L'ENEA - Roma

Via Vittorino Brancaccio
00144 Roma
Tel. 06/5213476
Telex 312107 ENEL I

Fac Simile 06/5213476
Telex 312107 ENEL I

DS10



ENEA - Via della Ricerca Scientifica, 1
00198 Roma, Italy - Tel. 06/54571

Comments to:

**REACTOR SITE CRITERIA 10 CFR Parts 50, 52 and 100
(Proposed Rules in Federal Register October 20, 1992)**

US Regulations, especially at the CFR level, have always played a relevant role in public debates that took place in our country; this is the main reason why we have to be very reactive to those parts of the proposed rules which could have a heavy impact on this debate.

In this respect the population density criterium (part 100.21) appears to be of major concern. In fact, if the figures reported into the rule, such as 500 people per square mile, are understood as Technical Reference, the future for nuclear energy would be even more difficult in Italy, as the averaged population density in our country is very close to the quoted figure.

We realize that such limit is written down in a form (should) which is not mandatory, however we are afraid that a misunderstanding is still possible.

On the other side, the Commission itself states that "nuclear power plants meeting current safety standards could be safely located at sites significantly more dense than 500 people per square mile", that reflects our position. In conclusion, our suggestion is to remove the specification of numerical limits.

Furthermore we think that such limits could find a better place in Regulatory Guides, where possible application criteria could be addressed, avoiding any possible misunderstanding and any arbitrariness in interpretation.

We agree that remote siting is part of the concept of defence in depth and that sites with as low as possible population densities have to be preferred; however we believe that very strict requirements could be too heavy if compared with expected accidental behaviour and could discourage plant improvements. In this respect we suggest to adopt more realistic criteria such as distance based weighting factors and limits applicable to sectors.

Regarding the other questions, we believe that most of them arise from the policy of separating siting from designing. This is clearly the case of the problems connected to the definition of the exclusion area. On this matter our opinion is that both Exclusion Area and Emergency Planning should be correlated to reactor design and related safety feature.

Other questions, such as the consideration of meteorological aspects

Also from geology and seismology point of view, the separation between the two phases: siting and design, is not always simple. Particular analyses, for example the bearing capacity, cannot be treated separately. Such analyses, sometime, can exclude the site both from the economic point of view and for the feasibility of particular earthworks (es. deep backfitting in areas where shallow confined aquifers are present).

For the seismic input, 0.1 g and a wide band spectrum are considered good reference (i.e. minimum value) for SSE.

The emphasis that is given to the importance of the "professional judgment" in taking decisions appears good. However it is important to put emphasis also on the fact that the judgment can be assessed properly when good Experts and good databases are available.