ICS 27.120.20
CCS F 69

NB

ENERGY INDUSTRY GUIDING TECHNICAL DOCUMENT OF THE PEOPLE'S REPUBLIC OF CHINA

NB/Z 20617-2021

Public communication guide for nuclear power projects in preliminary stage

核电项目前期阶段公众沟通指南

Issued on: April 26, 2021 **Implemented on: July 26, 2021**

Issued by: National Energy Administration of the PRC

Table of Contents

Foreword

This document was issued on 26 April 2021 by the National Energy Administration of the PRC and takes effect on 26 July 2021.

It is a NB/Z guiding technical document: it does not oblige, it guides.

It is classified under ICS 27.120.20, Chinese classification F 69.

This document was drafted in accordance with the rules given in GB/T 1.1-2020 Directives for standardization - Part 1: Rules for the structure and drafting of standardizing documents.

This document was proposed by the Nuclear Power Standardization Technical Committee of the Energy Industry.

This document is under the administration of the Nuclear Industry Standardization Research Institute.

Drafting organizations of this document: Nuclear Power Operation Research Institute of CNNC; China National Nuclear Power Co., Ltd.

Main drafters of this document: Guo Jun, Ye Xiang, Zuo Yue, Wang Zhenqing, Hu Xiaocong, Wang Yang, Fang Zhaoxia, Shen Shuguang, Li Sujia, Huang Fang.

1 Scope

NB/Z 20617-2021 is the Chinese guiding technical document for the public communication an operator has to carry out before the first concrete is poured for a nuclear island. It exists

because in China the binding constraint on new nuclear build has for some years been social rather than technical: several projects have been suspended or moved after local opposition, and the industry treats public acceptance as a risk to be managed with the same seriousness as a design basis accident. What makes this document unusual is that it does not stop at telling operators to inform the public. It builds a vocabulary for what opposition actually is, defining the not in my backyard effect and then dividing the behaviour it produces into three graded kinds - self-hold behaviour, in which people quietly avoid and stockpile; message collection and dissemination behaviour, in which unverified risk information is gathered and passed on; and agonistic behaviour, the banners, the anti-nuclear organisations and the collective strolling that damage social stability. It defines nuclear safety anxiety and separates accident anxiety from environmental anxiety and from capability anxiety, and it defines the warning signs and risk grades by which a rising problem is detected before it becomes a crisis. Clause 4 then sets the operational requirements across five areas: public information, public participation, information disclosure, response to public opinion, and social stability analysis. The requirements are concrete rather than aspirational: a dedicated public reception centre; information work covering the whole province with a priority zone of 15 km and an information zone of 30 km from the site, extended into neighbouring provinces where the zone crosses a boundary; questionnaire surveys of at least 300 responses per round, sampling both inside 15 km and out to 30 km; discussion meetings of at least 30 people with minutes published promptly; public hearings of at least 15 representatives announced in advance; and a written undertaking of responsibility for the truthfulness of the public participation statement. Three informative annexes carry the assessment criteria, an assessment method and a modular questionnaire for measuring public acceptability of nuclear energy. It was issued on 26 April 2021 by the National Energy Administration and took effect on 26 July 2021.

This document specifies the basic requirements for the public communication activities carried out by the operating organization during the preliminary stage of a nuclear power project within the territory of the People's Republic of China.

This document applies to the conduct of public communication activities by the operating organization during the preliminary stage of a nuclear power project; other nuclear facilities may use it for reference.

2 Normative references

This document has no normative references.

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 nuclear power project in preliminary stage

The stage of a nuclear power project before the date of the first concrete pour of the nuclear island (FCD).

3.2 public communication

The process of transmitting information to the public and obtaining information from the public, within a given social environment and by various means of information exchange, with the aim of obtaining the understanding or the positive response of the public.

3.3 performance assessment

The periodic and non-periodic assessment of the capability and the performance of the object of assessment, carried out in accordance with predetermined criteria and a defined assessment procedure, using scientific assessment methods and following the content and criteria of the assessment.

3.4 not in my backyard

The situation in which residents or organizations, worrying that a construction project will bring many negative effects on their physical health, on the quality of the environment and on the value of their property, develop feelings of aversion and the do not build it in my backyard mentality, and thereby adopt strong and determined, and sometimes highly emotional, collective opposition or even protest behaviour.

3.5 agonistic behavior

A kind of not in my backyard effect (3.4). Strongly resistant behaviour that arises when emotional dissatisfaction rises to a certain level and that has a certain destructive effect on social stability, including relocation or flight, meaning disorderly flight, and resistance and opposition, such as hanging banners, setting up anti-nuclear organizations and collective strolling.

3.6 self-hold behavior

A kind of not in my backyard effect (3.4). Self-hold behaviour is the passive behaviour chosen by members of the public when they feel powerless in the face of a nuclear power project and of nuclear risk. Its effect is weaker than that of message collection and dissemination behaviour and of agonistic behaviour, and it does not immediately damage social stability. It includes avoidance, such as going out less often or moving away from the source of pollution, and protection, such as refusing to buy certain suspect goods, stockpiling protective supplies and undergoing regular medical examinations.

3.7 message collection and dissemination behavior

A kind of not in my backyard effect (3.4). Behaviour in which members of the public, out of a heightened concern for nuclear safety, privately exchange information related to the nuclear power project, and in particular negative information, in an attempt to confirm the risk and to share their worry. Note: information here refers in particular to unverified statements or

interpretations of some matter. Message collection and dissemination consists of two stages. The first stage takes the form of the collection of formal or informal information, such as following media reports about the nuclear power project or about nuclear risk, picking up fragments of what others say, and noticing signs of risk related to nuclear matters. In the second stage the public then pass the risk information on to the people around them without verifying it.

3.8 nuclear safety anxiety

The anxiety brought to people by the safety risk that exists in the construction and operation of a nuclear power project. It includes the following kinds: accident anxiety, which takes the form of fear that a nuclear accident cannot be predicted, and of insomnia caused by worry about a nuclear accident; environmental anxiety, directed mainly at the damage that the nuclear power project brings to the living environment, such as worry that the radiation dose will exceed the limit, doubts about the treatment of nuclear waste and the suspicion that the water supply and the food have already been contaminated; and capability anxiety, such as regret at living near the nuclear power project combined with the inability to change it, not knowing what to do because of one's own lack of ability to withstand a nuclear accident, and understanding of and agreement with self-protective behaviour such as panic buying of salt.

3.9 clinical manifestation of anxiety

The clinical manifestations produced when safety anxiety reaches a relatively high level, so that a person's condition goes beyond the psychological and emotional and is projected further into physiological reactions.

3.10 social stability risk

The possibility that the social conflict and social instability in the surrounding area caused by a nuclear power project bring about the outbreak of a social crisis in that area, specifically including instability of the social order and instability of the social mood.

3.11 warning sign

A phenomenon that appears in advance, and that can be observed, during the incubation and growth of a hazardous situation.

3.12 risk grade

The early warning level, artificially divided in order to express the severity of the risk, obtained by combining historical experience with the analysis of the warning sign alarm zones by qualitative and quantitative methods.

4 General requirements for public communication

4.1 Overall requirements