

Basic Research on Nuclear Power Plant Construction Claims and Dispute Management Processes Development

HyeJin Son¹, SangHyun Lee² and SuJin Byon³

Abstract: *A nuclear power plant construction is a complex form of construction which comprises various stakeholders and contractors. Therefore, contract disputes will occur due to conflicting interests of contracting parties and unpredictable factors which arise during construction work. Even if the contract is well prepared, it cannot fully prepare for future situations in actuality. Claims management is very important in carrying out construction management. This study intends to define claim, and delve into development of claims management processes from the viewpoint of owners and contractor through consideration on international contract terms on claims management and the details of the claims management of the Construction Extension to the PMBOK. In addition, it is needed to accumulate and manage data on claims that have occurred so that they can be referenced in the future. As information should be accumulated so that type classification can be carried out and that lessons can be learned on claims that have occurred in each business site, study on establishing data-based systems relating to claims processes will be needed in the future.*

Keywords: *Claims, Claim Management, Construction Management, Claim Processes, Project Management*

I. INTRODUCTION

A nuclear power plant construction involves complex and various contractual relationships, has a high risk of contract disputes. Therefore, it is an important issue how to manage claims and disputes among stakeholders. This study intends to delve into development of a claims management process through research on the definition of claim, requirements thereof, international contractual terms which are commonly used in construction works, and claims management.

II. CURRENT SITUATION OF CLAIMS MANAGEMENT

A. Definition of Claim, and Requirements Thereof

Before addressing claims management, let us look on the requirements of claims establishment based on the definition of the term, 'claim'. The reason for defining claim is that complaints (complaints filings) are often confused with claims in construction of a nuclear power plant because a lot of public complaints are normally raised. "Claim" also includes other disputes and matters in question between the Owner and Contractor arising out of or relating to the Contract."

1) According to the CMAA (Construction Management Association of America), a claim is defined as "a formal demand for compensation, filed by a contractor or the owner with the other party, in accordance with provisions of the contract documents.[1]

2) According to the AIA(American Institute of Architects), "a claim is a demand or assertion by one of the parties seeking, as a matter of right, payment of money, or other relief with respect to the terms of the Contract.[2]

The term "Claim" also includes other disputes and matters in question between the Owner and Contractor arising out of or relating to the Contract."

3) Requirements of Claims Establishment

Based on the definition of claim in the above 1) through 2), the requirements for claims establishment can be derived as the following:

- A) Positions as contracting parties
- B) Demand in writing
- C) Based on contract and relevance of piling time limit
- D) Submission of detailed data relating to claims
- E) Identification of claimed money amount

B. Claims Management under the Conditions of Contract for Construction of the FIDIC

The FIDIC specifies claims, disputes, and arbitration in Clause 20 of the Condition of Contract for Construction. When a claim is not settled in the procedure of determinations (consultation between the parties, etc.), it settlement will be tried through an independent Organization called the Dispute Adjudication Board. If it is not settle with the decision of the Dispute Adjudication Board, it will be settled finally through arbitration.[3]

C. Claims Management under the Construction Extension to the PMBOK Guide, Third Edition.

According to the Construction Extension to the PMBOK Guide, claims management can be categorized into 4 areas as the following: The claim is checked/identified, and its quantification is judged. Then, the claim resolution process is carried out, in which negotiation on the claim is made, or arbitration/litigation is processed, claims costs are

¹ Senior Management, 70-1312 Yuseong-daero Yuseong Daejeon Korea, niecho@gmail.com (*Corresponding Author)

² Researcher, 70-1312 Yuseong-daero Yuseong Daejeon Korea, 12zero514@khnp.co.kr

³ Researcher, 70-1312 Yuseong-daero Yuseong Daejeon Korea, suj.in.byon@khnp.co.kr

calculated, and the claim is finalized. In addition, in the claim prevention process, possibility of claims occurrence is prevented in advance through checking whether contract documents (contract, special conditions, design documents, specifications, etc.) conflict one another, or have unclear contract conditions. [4]

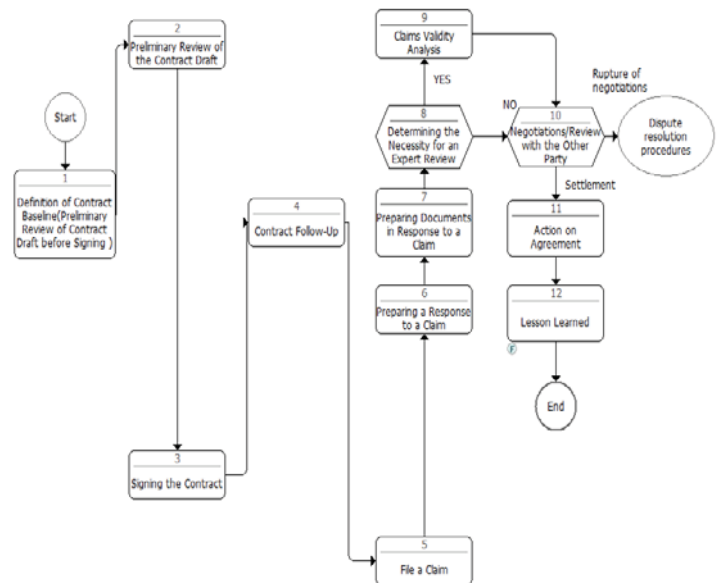
III. DEVELOPMENT OF CLAIMS MANAGEMENT PROCESS

In construction projects of nuclear power plants in Korea, contracting and claims management are made from the viewpoint of the owner as a public authority. On the contrary, in order-taking of overseas nuclear power plant construction projects, contracting and claims management are made from the viewpoint of the contractor. Therefore, this study addresses claims management processes as divided into two categories as in the following:

A. Claims Management from the Viewpoint of the Owner

The first work of claims management is to establish contract conditions. By being fully knowledgeable of the relevant laws and procedures such as national laws on contracting and general conditions of construction, care should be taken so that defects cannot occur during contract implementation. After a contract management department enters into a contract, contract follow-up management will be carried out, when roles of the construction supervisor are important. The supervisor should be knowledgeable of special events such as contract amount adjustment causes, contract cancellation causes, and bankruptcy of any joint contractor which may cause claims. When any such event occurs, the supervisor will arrange and manage evidential data relating to facts. When a claim is filed by the contracting party, claim response preparations will be made. Claim response documents will be prepared by reviewing the specified responsive rights of the owner relating to the cause of the claim. In preparing the related documents, the requirements and procedures specified in the construction general conditions will be followed, and the supporting clauses will be indicated. In addition, expert review will be sought as needed, claim will be validated in collaboration with a litigation group, and the responsive position of the owner of the nuclear power plant construction project will be finalized before consultation with the counterpart. Then, the claim will be addressed through consultation with the counterpart. After all the agreement procedures are completed, claim-related records such as the summary and progress of the claim will be compiled and managed for future reference. If the consultation with counterpart fails, disputes procedures will be followed in accordance with the contract.

Figure 1 Claims Processes Seen from the Viewpoint of the Owner



B. Claims Management from the Viewpoint of the Contractor

The biggest difference in the claims seen from the viewpoint of the contractor is whether to raise a claim. Here, as claims are mainly raised by the contractor, the contractor must carry out thorough preparations of claims documents. The claim will be submitted in writing, while evidential data such as photos, statements of related persons, as-built progress, and the site construction status will be secured in advance, because securing of reliable evidences will be difficult if time elapses, and the site condition is damaged. The process after this step will be the same as those for the claims handling process seen from the viewpoint of the owner.

IV. CONCLUSION

In claims management, claims prevention is very important, while processes are important. Therefore, it is a prerequisite to prepare and use contract documents that are based on standard contracts utilized worldwide. In addition, it is needed to accumulate and manage data on claims that have occurred so that they can be referenced in the future.

ACKNOWLEDGMENT

This work was supported by the Development of process & System for NPP project management of the Korea Institute of Energy Technology Evaluation and Planning (KETEP) grant funded by the Korea government Ministry of Knowledge Economy. (No.2014151010171A)

REFERENCES

- [1] Construction Management Association of America, "Construction Management Standard of Practice", pp5, 2011
- [2] C. G Park, S.K. Kim, S.J Go, "Public Construction Design Changes & Claim", pp 393-433, 2010.
- [3] FIDIC, "Conditions of Contract for Construction", pp107-114, 1st Edition, 1999
- [4] Project Management Institute, "Construction Extension to The PMBOK Guide Third Edition", pp167-178, 2007