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L40-84(08-22)-L  
0982-L

ILLINOIS POWER COMPANY



CLINTON POWER STATION, P.O. BOX 678, CLINTON, ILLINOIS 61727

August 22, 1984

Docket No. 50-461

Director of Nuclear Reactor Regulation  
Attention: Mr. A. Schwencer, Chief  
Licensing Branch No. 2  
Division of Licensing  
U. S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Subject: Clinton Power Station Unit 1  
Independent Design Review Program Plan

Dear Mr. Schwencer:

Your letter to me of August 6, 1984 provided the comments of the NRC Staff on the Independent Design Review (IDR) Program Plan (Rev. 1) for the Clinton Power Station prepared by Bechtel Power Corporation (Bechtel).

We have received the attached Bechtel letter of August 17, 1984 (from Mr. G. L. Parkinson to Mr. J. D. Geier) forwarding Bechtel's response to the NRC Staff's comments. We have reviewed Bechtel's response and believe that it both improves the Program Plan and provides a satisfactory resolution to the NRC comments. Accordingly, we are concurring in Bechtel's suggestion that the response be considered as an immediately effective amendment to the Program Plan, and the IDR is proceeding in that fashion.

Sincerely yours,

A handwritten signature in dark ink, appearing to read 'D. P. Hall'.

D. P. Hall  
Vice President

MA/lm

Enclosure

cc: See attached distribution list

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Clinton Power Station

Independent Design Review  
Standard Distribution List

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Washington, D.C. 20555

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# Bechtel Power Corporation

Engineers—Constructors



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San Francisco, California

Mail Address: P.O. Box 2965, San Francisco, CA 94119

August 17, 1984

BLI-11

Mr. J. D. Geier  
Illinois Power Co  
500 South 27th St.  
Decatur, Illinois 62526

Subject: Clinton Independent Design Review  
Illinois Power Company  
Job No. 15478-003  
Program Plan - July 1984 (Rev. 1)

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Enclosure (a): Responses to NRC comments, dated 8/16/84.

Reference (a): Letter from A. Schwencer to D.P. Hall, dated August 6, 1984,  
subject: Clinton Independent Design Review (IDR) Program Plan.

Reference (b): Program Plan, Independent Design Review of Clinton Power  
Station, Unit 1, dated July 1984. (Rev. 1)

Dear Mr. Geier:

As requested, we are providing Enclosure (a), as our response to the NRC letter of Reference (a), which commented on the Program Plan, Reference (b).

This response is intended to be fully responsive to the key elements of the NRC comments (Reference (a)). We believe that the Program Plan, as clarified by Reference (a), fully complies with the NRC comments.

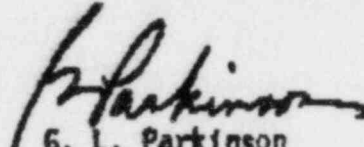
Unless you instruct us otherwise, we intend to attach the enclosed response to the Program Plan and consider it an immediately effective amendment to the Program Plan.

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J. D. Geier  
Page Two  
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Please advise if we can be of further assistance.

Very truly yours,

  
G. L. Parkinson  
Project Manager

cc: M. Axelrad, w/att.  
C. D. Fox, w/att.  
J. Foy, w/att.  
R. Goddard, w/att.  
D. P. Hall, w/att.  
R. C. Heider, w/att.  
R. Hubbard, w/att.  
J. L. Milhoan, w/att.  
A. Samelson, w/att.  
B. L. Siegel, w/att.

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Responses to  
NRC Comments on Clinton IDR Plan  
(By item number of NRC comments of 8/6/84)

1. After consideration of the NRC concerns, it is agreed that a modification is appropriate to the proposed system selection and scope for mechanical design aspects of the systems to be covered by the Clinton IDR. Accordingly, we now propose a full review of the shutdown service water (SSW) system and a limited review of the high pressure core spray (HPCS) system from the containment penetration to the reactor vessel, to cover design areas described below. This would be in addition to the review of the Class 1E ac electrical distribution system already proposed.

The SSW system is a reasonably complex system requiring several different modes of operations, has redundancy, and the full range of single failure considerations. In addition, the conceptual and implementing design is done by Sargent and Lundy (S&L). It has significant interfaces with General Electric such as heat loads and the safe shutdown control panel. However, it is essentially independent of General Electric design influence and is sufficiently complex to be representative of other systems.

The proposed section of the HPCS system selected provides for the analysis and support of a piping system with a higher design temperature, and the qualification of components in a harsh environment. The analysis and support design are both done by S&L for the HPCS system.

Design for HELB/MELB protection will be reviewed on a functional basis, across systems, and will not be limited by scope of the above systems. The depth and breadth of this review will be consistent with the example review plan provided with the NRC comments.

2. We agree with the NRC that procedural violations and trends in even minor deficiencies in technical or procedural violations should be identified and recorded. This was always intended. Accordingly, the



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interpretation of Observations will be that of including all meaningful deficiencies. However, we believe there is a minimum threshold below which it cannot be justified to pursue insignificant deficiencies. Thus the individual reviewer will identify and record deficiencies (other than trivial ones), and will identify each deficiency which he determines should not be reviewed further because in his judgement is not significant. These review records will be maintained and will be available for NRC inspection.

3. Implementing procedures will be a combination of existing EDPs and IDR-special procedures. Both types are combined into a single project procedures manual, which is approved by the Project Manager and Project Quality Assurance Engineer. A listing of planned IDR-special procedures not based on EDP's procedures is as follows:

IDR Procedure #1	Communications
IDR Procedure #2	Review Process
IDR Procedure #3	Processing of Observations
IDR Procedure #4	Walkdown

We believe the titles are sufficiently descriptive to indicate the intended scope.

4. The civil-structural aspects will be covered in the IDR as described during the referenced June 28 meeting. (See Transcript pages 89-90). This assures reviews which evaluate the safe load path from system supports to the building foundation, where appropriate.
5. We agree that potential generic deficiencies should be pursued and the IDR will do this. However, we believe there should be some flexibility in the IDR as to how they are pursued and by whom. Accordingly, we propose that Bechtel be given discretion as to whether such matters are investigated outside the systems of IDR scope, by Bechtel or by others. If by others, then Bechtel would have responsibility of reviewing the results and concurring with determinations made. Bechtel will do enough examination itself to determine if generic deficiencies exist, or will verify that the examination has been performed by others. The basis for deciding how and by whom generic issues are to be pursued will be documented.

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6. It is intended that documents of the type mentioned by NRC will be included in the IDR. The listings in the Program Plan are typical but not complete.
7. There is every intention of reviewing requirements as stated in the NRC comments to reflect ANSI N45.2.11 and no intention to do otherwise.
8. The IDR recognizes the situation described by I&E Notice 84-54 and is prepared to cover it in the review, including missing calculations reflecting undocumented judgements. These instances will be documented, and meaningful situations covered in the final report.
9. The April 1, 1984 cutoff date will be observed and subsequent work will be identified. That work will be assessed as to its impact on meeting requirements, on design adequacy, and on the design process. It will also be assessed for its significance to other areas outside the immediate scope of the IDR. Where the IDR team concludes there is a concern, this will be pursued.
10. The purpose of the field as-built review is for Bechtel to ascertain whether the S&I design documents were effectively understood by the users. This will be accomplished by selection of representative design documents and development of a review plan based on the essential features called for by such design documents. This is an engineering/design check, not a construction work inspection. Therefore, IDR Procedure #4 - Walkdown will emphasize general arrangements, correct orientation of parts, selection of options for specific applications, and satisfactory appearance of installation. The review plan will be developed and made available to the NRC during the course of the IDR.
11. Activities for which procedures were not followed will be documented, as described in the NRC comments.
12. Where procedures are required but not available, they will be documented as described in the NRC comments.

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13. The IDR will follow the requirements of ANSI H45.2.11 in evaluating the design process as described in the NRC comments.
14. All potential observations will be retained in files of the IDR.
15. We concur with the NRC comments and expect to discuss its recommendations for the IDR report content at a later date.
16. We concur that Protocol will not be construed as limiting discussions with the NRC.
17. The Protocol will be interpreted as stated in the NRC comments.
18. The example review plans are intended to be used in the vertical reviews. The samples provided by the NRC are consistent in depth of review with what we intend for the specific design activities covered. The same depth of review is intended for other design activities. We do not believe it is necessary to rewrite the existing Bechtel plans to provide additional detail.

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