

# **ABB Power Generation**

---

## **SAFETY AND HEALTH**

### **Amendment of citation**

The Board will not allow amendment of a Citation and Notice where defending against the amended citation could involve different witnesses and exhibits than defending against the originally cited rule. ...*In re ABB Power Generation, BIIA Dec., 93 W469 (1994)*

### **Safe workplace rule**

With respect to the general safe workplace citation, to establish a violation, the Department must prove the employer failed to provide a workplace free of hazard, which was recognized, and likely to cause death or serious injury. Since the employer's operation involved equipment which was inherently dangerous, the Board considered a fourth criterion, indicating the Department must specify the particular steps an employer should have taken to avoid a "safe place" citation and demonstrate their feasibility. *Citing In re City of Seattle, BIIA Dec., 89 W136 (1991). ...In re ABB Power Generation, BIIA Dec., 93 W469 (1994)*

Scroll down for order.



1 be addressed. We therefore affirm this ruling. We also find our industrial appeals judge committed no  
2 other prejudicial evidentiary errors. These rulings are accordingly affirmed.  
3

#### 4 DECISION

5 ABB Power Generation, Inc. (ABB) is in the business of upgrading and maintaining  
6 hydroelectric generating units. It obtained a contract to work on the Priest Rapids Dam on the  
7 Columbia River. ABB was hired to replace parts of the generator at Unit 8 of the dam, and to test and  
8 check its functioning. This generator weighs approximately 750 tons. It has three principal  
9 components. A rotor is attached to a turbine-driven generator shaft. The rotor contains poles that  
10 provide the magnetic field necessary to generate electricity. The stationary generator housing  
11 contains the stator. During normal operations, baffles or air shrouds cover the rotor and stator. See,  
12 Exhibits 18-20, especially Exhibit 20, which is a labeled explanatory diagram of a hydroelectric  
13 generator.  
14

15 For a generator to operate successfully, the clearances between the rotor poles and the stator  
16 must be uniform (no more than 3/8 of an inch apart). Accordingly, a test to check the clearances  
17 between the rotor and the stator is a routine part of ABB's maintenance work on hydroelectric  
18 generators. This procedure is called a "roundness" test. The test procedure is described somewhat  
19 sketchily in the record, but apparently is conducted following these procedures. A portion of the  
20 baffles is removed from the top of the generator, so the clearances between the rotor and stator can  
21 be measured visually and by machines. The generator is turned off, and the rotor is manually turned  
22 by approximately six men. During this process, ABB instructs these men to remain at their assigned  
23 positions and to push and stop the rotor with their legs. While the rotor is slowly spun under human  
24 power, an employee marks places that are out of alignment and locations where debris has fallen.  
25 After these locations are marked, the rotor is stopped so each problem can be addressed while it is  
26 stationary.  
27

28 On November 30, 1992, ABB was following its normal procedures while conducting a  
29 "roundness" test on unit 8 of the Priest Rapids Dam. Martin Baenen was one of the six ABB  
30 employees assigned to push and stop the rotor. Contrary to his instructions, he left his post to try and  
31 remove a piece of duct tape on the rotor. While attempting to remove this debris, he lost his footing  
32 and was pulled into a narrow space between an adjacent baffle and the rotor top. This accident had  
33 very tragic results: Mr. Baenen's limbs were severely crushed. He was hospitalized and died  
34 approximately two weeks later as a result of his injuries.  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47

1 The day after the accident, Robert Wavra, a Department of Labor and Industries Safety  
2 Inspector, investigated the Priest Rapids Dam work-site. On February 18, 1993, he issued a Citation  
3 and Notice in which he cited ABB for violating a hand and power tool guarding rule, WAC 296-155-  
4 350(2)(b), and assessed a penalty of \$100.00. ABB promptly filed an appeal from this citation. On  
5 May 22, 1993, the Department issued a Corrective Notice of Redetermination which amended the  
6 citation by alleging ABB had violated a "safe place" rule, WAC 296-155-040(2), rather than the  
7 previously cited one. ABB duly filed a timely appeal with this Board. Since we determined the  
8 Corrective Notice of Redetermination was untimely, we considered this appeal to be taken from the  
9 Citation and Notice. Accordingly, as of the eve of trial, the only issue to be litigated was whether ABB  
10 had violated the guarding rule cited above. However, on the day of the hearing, our industrial appeals  
11 judge granted the Department's oral motion to amend the citation to plead both violations in the  
12 alternative. The Department was thus allowed to try and sustain its citation on either grounds, but  
13 could only impose a penalty for a single violation. ABB objected to this amendment. Our industrial  
14 appeals judge found that ABB had violated both rules, and therefore sustained the Citation and Notice.

15  
16 In its Petition for Review, ABB maintains the provisions of WAC 296-155-350(2)(b) are  
17 inapplicable because they govern guarding on machine and power tools, not generators in a  
18 hydroelectric dam. ABB also contends the Department failed to meet its burden of proving the Priest  
19 River Dam workplace was unsafe, in violation of the standard in WAC 296-155-040(2), because the  
20 Department did not specify any additional feasible safety measures it could have employed. Based on  
21 our review of the record and governing law, we agree with the employer and conclude our industrial  
22 appeals judge erred in affirming the amended Citation and Notice. We instead vacate the citation  
23 based upon our determination the Department did not introduce sufficient evidence to sustain  
24 violations of either rule.

### **APPLICABILITY OF GUARDING RULE**

25 WAC 296-155-350(2)(b) is found in the chapter of rules pertaining to safety standards for  
26 construction work. It is the first rule in Part G of Chapter 296-155, which is entitled "Tools-Hand and  
27 Power". Its provisions require rotating and moving parts of equipment to be guarded if employees are  
28 exposed to them.

29 We conclude ABB's operations at the Priest River Dam did not violate the provisions of this  
30 rule. First, we note there is no evidence the generator in Unit 8 was insufficiently guarded during its  
31 normal operations. ABB removed a portion of the upper baffles during a "roundness" test solely to  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47

1 perform necessary maintenance and testing. During the testing, the generator was disconnected and  
2 was being turned under human power. Regardless of the applicability of this rule to hydroelectric  
3 generators, an employer should not be cited under it for removing a guard or baffle while a machine is  
4 disconnected and operated manually to perform needed repairs. ABB clearly established it could not  
5 perform critical maintenance work on the generator without removing some of the baffles normally  
6 surrounding it. If we were to sustain this citation, we would, in effect, place the employer in a difficult  
7 position of having to perform seemingly inconsistent acts. Such a ruling defies common sense and we  
8 decline to make it here.  
9

10  
11  
12  
13 In any event, we also conclude the provisions of WAC 296-155-040(2)(b) do not govern the  
14 operations of moving parts in hydroelectric generators. As part of a chapter containing safety  
15 standards for the construction industry, this rule only concerns guarding on hand and power tools.  
16 This is further clarified by the rule's requirement for guards to conform to the American National  
17 Standards Institute (ANSI) code requirements for mechanical power-transmission apparatus. The  
18 Department inspector conceded a hydroelectric generator was not such an apparatus. Accordingly,  
19 the provisions of this rule are irrelevant here.  
20  
21  
22

23  
24 We further note the inspector also admitted he was unfamiliar with the ANSI requirements  
25 specified in the rule and had not checked them before citing ABB. Again, there is no evidence this  
26 rule's requirements were violated because it is possible the baffling on the generator, when in place  
27 during normal operations, complied with these requirements. In any event, since we have determined  
28 this rule's provisions are inapplicable to hydroelectric generators, ABB cannot be cited for violating  
29 them.  
30  
31

### 32 **GENERAL DUTY CLAUSE**

33  
34 Turning next to the Department's citation for a violation of the general work-place safety  
35 standards, as contained in WAC 296-155-040(2), we conclude this citation should also be vacated.  
36 The Department did not establish that there were any feasible alternatives to more safely complete its  
37 "roundness" check of the generator. As a result, the Department failed to present sufficient proof to  
38 sustain this violation.  
39  
40

41  
42 To establish a violation of this rule (the general duty clause), the Department must prove 1) the  
43 employer failed to provide a workplace free of a hazard which was 2) recognized and 3) likely to cause  
44 death or serious injury. In re City of Seattle, BIIA Dec. 89W136 (1991). In this decision, we adopted  
45 the test unanimously applied by other jurisdictions ever since the Occupational Safety and Health Act  
46  
47

1 was enacted. See, e.g., National Realty & Construction Co. v O.S.H.R.C., 489 F.2d 1257 (D.C. Cir.  
2 1973); Donovan v. Royal Logging Co. and O.S.H.R.C., 645 F.2d. 822 (9th Cir. 1981). However, this  
3 general language does not specifically define ABB's responsibility to provide a work-place free from  
4 recognized hazards. Hydroelectric generators are inherently hazardous. In this appeal, the real task  
5 is to delineate ABB's responsibility to limit the hazards to which its employees are exposed while  
6 conducting a "roundness" test.  
7

8  
9  
10 Courts have addressed this issue by imposing a fourth evidentiary requirement. In addition to  
11 meeting the three-prong test detailed above, the Secretary of Labor must specify the particular steps  
12 an employer should have taken to avoid a "safe place" citation and must also demonstrate their  
13 feasibility. Donovan v. Royal Logging Co., at 829. This four-part formulation of the moving party's  
14 evidentiary burden in "safe place" citations has been uniformly adopted by the United States Court of  
15 Appeals, the U.S. Secretary of Labor, and the Occupational Safety and Health Review Commission.  
16 Mark Rothstein, Occupational Safety and Health Law, Third Edition, Section 150 at 194(West 1990).  
17 To meet the fourth prong of this test, the Department must establish that a safety precaution was  
18 available to the employer which safety experts familiar with the pertinent industry recognize as  
19 feasible. Voegelé Co. v O.S.H.R.C., 625 F.2d 1075 (3rd Cir. 1980).  
20

21  
22 Since the Department failed to establish any feasible safety alternatives existed which ABB  
23 could have used while performing the "roundness" test on Unit 8, it did not establish ABB provided an  
24 unsafe workplace. The Department presented the evidence of only one witness, Mr. Wavra, the  
25 safety inspector, to support this citation. Mr. Wavra was insufficiently familiar with the operations of  
26 this very specialized work environment to credibly establish the feasibility of any alternate safety  
27 measures. Mr. Wavra admitted he had not received any training regarding inspecting a hydroelectric  
28 generating unit and did not fully understand the nature of the work under way when Mr. Baenen was  
29 fatally injured. Mr. Wavra was unfamiliar with the guarding and safety standards applicable to  
30 hydroelectric generators. In fact, he had only inspected a hydroelectric dam once before, during the  
31 1970's. In short, the hearing transcript makes it quite evident that Mr. Wavra had no familiarity with  
32 hydroelectric industry operations.  
33

34  
35 Accordingly, we gave little weight to Mr. Wavra's testimony regarding the only proffered  
36 alternative ABB could have used while conducting its "roundness" test. Mr. Wavra drew a sketch of a  
37 modified baffle that he tentatively thought met the Department's safety concerns. See, Exhibit 17.  
38 This baffle would allow a partial view of the top of the generator and, according to Mr. Wavra, would  
39  
40  
41  
42  
43  
44  
45  
46  
47

1 therefore not need to be removed to conduct a "roundness" test. There are several major problems  
2 with this idea. First, Mr. Wavra admitted he did not even know if such a baffle was manufactured or  
3 could be made available to ABB. Additionally, ABB introduced testimony from Kenneth Howell, its  
4 Director of Installation for its hydropower division, that this baffle design would not work in the field.  
5 Mr. Howell, who has spent over twenty years working on hydroelectric generator installations, testified  
6 this modified baffle would not allow ABB's employees to obtain the visual inspections and instrument  
7 measurements essential to performing a "roundness" test. With this evidentiary record presented by  
8 the Department, we can only conclude there was no feasible safety measure ABB could have utilized  
9 while conducting necessary testing of the hydroelectric generator at Unit 8 of the Priest Rapids Dam.  
10 ABB established it followed established industry standards while proceeding with the "roundness" test.  
11 It recognized the hazardous nature of this procedure and had conducted safety training of its  
12 employees regarding how to conduct this operation. ABB also had developed a safety manual and  
13 disciplinary procedures to deal with safety violations. Absent testimony from a person familiar with  
14 hydroelectric generators who could identify safer, feasible measures which should have been followed  
15 in this particular instance, this citation must be stricken.

16 In summary, since the Department did not introduce sufficient evidence to meet its burden of  
17 proof, we find ABB did not violate the general duty clause. We do not reach the issues raised by the  
18 employer regarding the employee misconduct defense, since, as with any affirmative defense, it need  
19 only be considered once the Department introduces sufficient evidence to present a prima facie case.  
20 Unless the Department establishes an employer failed to use a feasible alternative measure available  
21 at the time a citation was issued for a violation of the safe work-place standards in WAC 296-155-040  
22 or WAC 296-24-073, the citation cannot be sustained.<sup>1</sup>

### 23 **AMENDMENT OF PLEADINGS**

24 As we stated earlier, we conclude our Industrial Appeals Judge erred in granting the  
25 Department's motion to amend this citation. Although we have not reversed this ruling, our discussion  
26 below is intended to give our judges and the Department guidance regarding future litigation.

---

27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
<sup>1</sup>ABB was cited for violating the provisions of WAC 296-155-040(2), a rule which is specific to the construction industry. We question the propriety of a citation under this rule to maintenance work and repairs in a hydroelectric facility. However, this is a tangential issue since its provisions are basically identical to the provisions of WAC 296-24-073(2), the general "safe place" standard applicable to all work-places. Additionally, ABB does not maintain the Department cited the wrong rule. We note our discussion regarding the basic elements the Department must prove to establish violations of the general duty clause apply to both rules cited above.

1 We have previously sustained a Department motion to amend a citation to allow alternate  
2 pleading of the general duty clause in addition to a violation of a specific standard. In re Northwest  
3 Metal Fab & Pipe, Inc., Dckt. No. 91 W041 (June 30, 1992). However, this ruling was based upon a  
4 finding the amendment did not prejudice the employer. The Department is required to issue a citation  
5 that describes "with particularity the nature of the violation, including a reference to the provisions of  
6 the...rule...alleged to have been violated." RCW 49.17.120. This statutory notice provision requires  
7 that employers be given fair notice of each alleged violation, so they have an opportunity to prepare a  
8 defense. Carlisle Equipment Co. v. Secretary of Labor, 16 OSHC 1681 (1994). Accordingly, the  
9 Department should not be allowed to amend its pleadings unless the cited employer's ability to  
10 prepare its defense remains unprejudiced.

11 In this case, the Department orally moved to amend its citation at the start of the hearing.  
12 Without any advance notice, ABB was forced to defend against a broad allegation that its workplace  
13 was unsafe. Until the hearing date, ABB's defense involved a fairly limited issue: did it violate a  
14 guarding rule? Its defense to this citation was narrow and based on a legal argument that the cited  
15 rule was inapplicable to its workplace. Clearly, defending against a "safe place" violation, a more far-  
16 ranging charge, could involve different witnesses and exhibits than defending against a guarding rule.  
17 Accordingly, ABB's due process rights were violated because it was required to defend against a  
18 broader amended citation without any advance notice.

19 Our industrial appeals judges should carefully ensure motions to amend pleadings are timely  
20 filed. Unless a judge affirmatively determines amendment would not prejudice the non-moving party,  
21 the motion should be denied.

22 After consideration of the Proposed Decision and Order and the Petition for Review filed  
23 thereto, and a careful review of the entire record before us, we are persuaded that Citation and Notice  
24 No. 115532541 should be vacated.

#### 25 **FINDINGS OF FACT**

- 26 1. On December 1, 1992, the Department of Labor and Industries issued  
27 Inspection Report No. 115532541 to ABB Power Generation, Inc., dba  
28 Asea Brown Boveri, (ABB). On February 18, 1993, the Department issued  
29 Citation and Notice No. 115532541, describing a single serious violation of  
30 WAC 296-155-350(2)(b) in the amount of \$100.00. ABB filed an appeal  
31 with the Department of Labor and Industries Safety Division on March 8,  
32 1993. The Department reassumed jurisdiction by a notice dated March  
33 17, 1993. Thereafter, on May 22, 1993, the Department issued Corrective  
34 Notice of Redetermination No. 115532541. On June 11, 1993, ABB  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47



1 appealed the Corrective Notice of Redetermination. The Department  
2 transmitted the appeal to the Board of Industrial Insurance Appeals on  
3 June 22, 1993. In light of the ruling in The Erection Co. v. Department of  
4 Labor & Indus., 121 Wn.2d 513 (1993), this appeal is considered as taken  
5 from the Citation and Notice No. 115532541 issued on February 18, 1993.  
6 On May 10, 1994, the Department moved to amend the citation to plead a  
7 single violation, in the alternative, of either WAC 296-155-040(2) or WAC  
8 296-155-350(2)(b).

- 9  
10 2. ABB obtained a contract to work on the hydroelectric generator in Unit 8 of  
11 the Priest Rapids Dam during 1992. ABB was hired to test and check the  
12 functioning of this generator. As part of its work, ABB was required to  
13 conduct a "roundness" test to check the clearances between the rotor and  
14 the stator of this generator. On November 30, 1992, ABB was conducting  
15 the "roundness" test on the generator in Unit 8 of the Priest Rapid Dam.  
16 In compliance with standard procedures in the hydroelectric industry, ABB  
17 employees had removed a portion of the baffles shrouding the top of the  
18 generator. The generator was disconnected from its hydroelectric power  
19 source. As part of this procedure, approximately six men were instructed  
20 to manually turn and stop the generator with their legs. ABB had  
21 instructed all six of these men to remain at their assigned posts whenever  
22 the generator was being manually turned.
- 23 3. On November 30, 1992, while the "roundness" test on Unit 8 was in  
24 process, an ABB employee, Martin Baenen, was severely injured when he  
25 disregarded his employer's instructions and fell between the hydroelectric  
26 generator's rotor and a structural support of the surrounding baffle.
- 27 4. ABB did not violate the provisions of WAC 296-155-350(2)(b) while  
28 conducting the "roundness" test on Unit 8 on November 30, 1992. There  
29 is no evidence the baffles normally in place on Unit 8 violate the provisions  
30 of this rule. There is also no evidence that these baffles failed to meet the  
31 requirements set forth in the American National Standards Institute Safety  
32 Code B15.1-1953(R1958), Code for Mechanical Power-Transmission  
33 Apparatus.
- 34 5. A hydroelectric generator is neither a hand or a power tool nor a  
35 mechanical power-transmission apparatus.
- 36 6. There is no evidence ABB could have followed an alternate safer  
37 procedure while proceeding with its "roundness" test of Unit 8 of the Priest  
38 Rapid Dam on November 30, 1992. ABB conducted this "roundness" test  
39 in compliance with established hydroelectric industry standards. No safety  
40 expert familiar with the hydroelectric industry has recognized any  
41 alternative feasible steps ABB could have undertaken while conducting a  
42 "roundness" test of a generator which would have reduced the hazards  
43 encountered by ABB employees while engaged in this procedure.  
44  
45  
46  
47

