

BEFORE THE STATE OF WEST VIRGINIA
INTERMEDIATE COURT OF APPEALS

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QUANTA SERVICES, INC.,

Petitioner/Employer.

App. No.: 22-ICA-244
JCN: 2021018967
CCN: 80DF08911
DOI: 3/10/21

v.

ZACHARY BOLLING,

Respondent/Claimant.

BRIEF OF RESPONDENT

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I. RESPONSE TO ASSIGNMENT OF ERROR¹

The Board of Review correctly found that twenty-five-year-old Zachary Bolling sustained a serious electrical shock during the course of his employment on March 10, 2021, while holding a transmission power line. The shock stopped his heart and his respirations, and he had to be shocked by an on-site AED in order to be resuscitated. While the employer represented that Zac was not shocked because the line was grounded and others were working on the same line, an investigation of the incident that day revealed that his foreman, Freddie Ray Boggs was shocked later that same day when he grabbed the same power line. In addition, testing done by the foreman of that line after the claimant and the foreman were both shocked, showed that it had 600 volts of electricity on it. Nevertheless, neither the claimant, nor his wife were told this critical information by the employer, which left them and their medical providers scrambling to find a reason why Zac's heart stopped. Zac had to have an implanted heart monitor as a result. Then his claim was improperly denied.

A non-hired, Board Certified, Mayo Clinic trained cardio-electrophysiologist determined that Zac suffered from an electrical shock at work. His determinations of the cause of the claimant's cardiac event far outweighed the equivocal opinions of the employer's less qualified, hired experts. While the employer argues that Zac had a medication reaction, the cardiologist determined that Mr. Bolling's cardiac testing did not support medications as the cause of Mr. Bolling's cardiac failure because he did not have the findings a cardiologist would see on EKG if the medications were the cause.

Importantly, the Board of Review made findings of fact that were supported by the weight of the evidence of record. The findings of fact made by the Board were not clearly wrong, and its decision was not arbitrary, capricious, an abuse of discretion or based upon any error of law. The employer simply argues its favored interpretation of select evidence, ignores other evidence, and argues that this Court should reweigh the evidence essentially *de novo* and make different findings of fact. This is not the

¹ The employer did not provide an assignment of error in its briefing, but claimant assumes that it meant the Statement of the Case to be its assignment of error. For the record, claimant does not agree with any assignment of error of the employer in this matter.

Court's role on appellate review. As such, the employer has failed to meet its heavy burden on appeal. The overwhelming weight of the evidence shows that Zac was indeed shocked on the job. The Board of Review properly found his claim compensable and the October 3, 2022 order should be affirmed.

II. STATEMENT OF THE CASE

Zachary Bolling was working as a groundsman for a contractor of American Electric Power ["AEP"] called Service Electric. Their crew was assigned to dismantle a large transmission tower that had been damaged in a previous storm. (Shawn Fisher Dep. A210-11; Freddie Ray Boggs Dep. A259) The tower was up on a mountain with rocky terrain and it was windy that day. (Fisher A211-12; Boggs A259-62) At the time of his shock, Zac and the rest of the crew, which included his immediate foreman, Freddie Ray Boggs and the General Foreman, Philip Hanshaw, were in the process of lowering a transmission power line down from the tower in order to eventually disconnect the line from the tower. (Boggs A256-7; AEP Incident Investigation Rpt. A178-83) The transmission line they were working on that day was an express line, which meant that the line went directly from an area in Roanoke, Virginia to West Virginia, without any breaks down to a substation, and it carried 345,000 volts. (Fisher A212-15; Boggs A264; AEP Rpt. A178-83) To the foreman's knowledge, the area where they were working was the only spot it was grounded on the 400-mile line. (Boggs A264)

A lineman on the crew, Shawn Fisher, who was working up in the air in a bucket truck, measured the voltage at zero and grounded the transmission line to the transmission tower by connecting a grounding line from the transmission line (also called a "conductor," or "phase") to the tower. (Fisher A217-19, 223; Stmt. Jason Bryant A371-73; Boggs A266) The lineman began to lower it toward the ground level. (Bryant Stmt. A371; Fisher A217-19; Boggs A266) However, the grounding line he used, which was connected to the transmission line and the tower, was not long enough to reach all the way to the dirt level. (Fisher A221-22; Boggs A267) Therefore, the crew needed to grab the wire and connect it to another grounding line that ran to a rod that was in the dirt, which they did, and then the tower ground was removed. (Boggs A267; Bryant Stmt. A371; Fisher A221-23)

A. The line the claimant was working on was not sufficiently grounded.

One of the problems was that the rod was placed in rocky terrain and, according to AEP investigators, was only 10 inches in the ground. (AEP Rpt. A179) The foreman testified that it was really rocky and hard to get anything in the ground. (Boggs A281; AEP Rpt. Photos, Supp. Appx. 4) The foreman also testified that you need to put a grounding rod two to three feet into the dirt. (Boggs A281-82) Rocky terrain and a rod not deep enough in the soil make for a poor power ground.

Others on the crew along with the general foreman Hanshaw were grabbing the transmission line to continue to lower it down. (Boggs A266) According to foreman Boggs, Zac, who was closest to the rod, grabbed the transmission line as well, but Zac also had a hold of a rigging cable which had a large grip attached to it, which attached to a steel choker on a nearby dozer. (Boggs A266) Zac was the only one who had the rigging cable and the transmission line. (Bryant Stmt. A372; Boggs A266) The others only had a hold of the transmission line. (Boggs A288)

According to witnesses including the foreman, one of the crew told Zac to let go of the line, but he could not, and he tensed up and then collapsed to the ground. (Boggs A266,273,285; Bryant Stmt. A372) He was not breathing. (Fisher A227; Boggs A270-71) Co-workers began CPR. (Boggs A269-71) Zac started to turn blue. Foreman Boggs ran to the truck to get the AED--automated external defibrillator, which is kept on these worksites because electric power line workers are at risk for shocks causing cardiac arrest. (Boggs A269) The defibrillator is placed on the person and it tells the operator whether the person needs a heart shock or not. (Fisher A224-25) In this case, the AED instructed the operator that Zac needed a shock, and the AED administered the shock. (Fisher A224-25; Boggs A271) Zac thankfully began to take very shallow breaths and gasps of air. (Bryant Stmt.A372; Boggs A270-271) He continued to do so while he was being transported from the mountain worksite to an ambulance and then a Life Flight helicopter. (Fisher A226-227; Boggs A271-272) Zac remained unconscious. (Boggs A271)

Zac's wife Jessica was called by the employer and told that they did not believe Zac was shocked because the line was grounded and others were working on it. (Affidavit of Jessica Bolling A375-377) Zac was at the hospital, still unconscious.

B. That same day, the foreman was shocked on the same line and the line was measured showing 600 volts of electricity.

After Zac was transported to the hospital, the foreman and the crew gathered to give statements to the employer. (Fisher A232-33; Boggs A279-80) After giving statements, Foreman Boggs went back up to the site to secure the transmission line Zac was working on. (Boggs A274-75) When the foreman grabbed the line, which was still attached to the ground rod, he too was shocked. (Boggs A274-75; Bryant Stmt. A372; Fisher A230-31) Thankfully, the foreman was not shocked as severely as Zac. (Boggs A275) Boggs told everyone there he was shocked. (Boggs A276) He and lineman Shawn Fisher then tested the transmission line that shocked Zac and him. (Fisher A231; Boggs A277-8) The tester showed that the line had 600 volts of power on it, even though it was still connected to the same rod in the ground. (Fisher A231-3; Boggs A277; Bryant Stmt. A372) Foreman Boggs then told the AEP representative there, Josh Fisher, that they needed to call the hospital to let them know that Zac may have been shocked, and Boggs assumed that the employer safety man, Tony Booth called the hospital because he overheard him talking to someone about it, although he did not know who. (Bryant Stmt. A372-3; Boggs A276-7)

Six-hundred volts is a lot of electricity and is more than enough to stop a person's heart or kill them. For perspective, electricity from the transformer on the power pole leading to your home is only 120 to 240 volts. (Fisher A213)

C. The claimant was shocked because of induced voltage with an insufficient ground.

AEP and its safety contractor, Safety Management Group, performed an investigation of the incident. In the investigation report, AEP acknowledged that:

- Later in the day (approximately three hours after the event) it was discovered that there **was a measurable amount of induced voltage (500v-600v) on the grounded conductor where the crew had been working.**
- It was determined that **voltage was present due to a high impedance ground source.**²
- The ground was moved to the base of the structure, which was determined to be a lower impedance path to ground,³ and the crew was able to get a 0v [zero volt] reading on the conductor at that time and prior to the start of work the following day. (AEP rpt. A180, emphasis added)

² In other words, an insufficient grounding.

³ In other words, a proper grounding.

Upper management of the employer was also present at the scene. (Boggs A278)

Induced voltage is electricity that can occur on a de-energized power line, due to electromagnetic fields from surrounding lines or even from power a long way down a line. (*See Voice of Experience: Understanding Induced Voltage*, Danny Raines, *Safety Management Voice of Experience*, June 12, 2018, <https://incident-prevention.com/blog/voice-of-experience-1-3>; Fisher A231, 239) A high impedance ground source is a ground that does not create a good connection to the earth to dissipate the electricity, in this case the rod that was in rocky terrain and only 10 inches in the ground. (*See What is Soil Resistivity and How Does it Affect Grounding?*, NVent, February 19, 2019, <https://blog.nvent.com/erico-what-is-soil-resistivity-and-how-does-it-affect-grounding>. *See also*, Fisher A233-4, AEP Rpt. A178-83) There is more of a danger of injury from induced electricity when there are larger voltage lines, when it is windy, and when the line is not well grounded, all of which were present at the time Zac was shocked. (*See* Fisher A231; Boggs A282; AEP Rpt. A178-83)

While the employer suggested to AEP that an underlying medical condition may have caused Zac to collapse on the job site, even AEP reluctantly conceded that, “The crew member could have been negatively affected by the presence of induced voltage on the conductor.”⁴ (AEP Rpt. A180)

D. Neither the claimant nor his wife were told about the foreman getting shocked and that there were 600 volts measured on that line.

In the meantime, Jessica Bolling was at the hospital, scared about what happened to her husband. Remember that, when she learned of Zac’s injury on March 10, 2021, she was told that it was not a shock because there were two others holding the power line at the same time. Zac was on a ventilator and unresponsive. For that reason, she tried to think of anything and everything that she could that might help the hospital find out what happened to him. (J. Bolling Affid. A375) She mentioned to the hospital that he had a concussion with headaches after a car wreck in late 2015, where he would feel like he was going to pass out. (J. Bolling Affid. A375) In the year following the wreck (2016) he had an episode or episodes of passing out with the concussion/ headache. (J. Bolling Affid. A375) He also took medications for

⁴ In other words, he was shocked.

anxiety/ADHD. She also told the hospital that he took a weight loss medication in the past [phentermine], and he might have started back on them recently. (J. Bolling Affid. A375) However, after he was released from the hospital, they contacted the clinic where he went for weight loss in the past and found out that, in reality, he had not been recently prescribed any weight loss medication. (J. Bolling Affid. A375)

Once Zac regained consciousness, Zac did at first tell the doctors that he was shocked and felt it go into his left finger and that he had his left elbow on the line. The doctor found marks on his left index finger, on his left elbow and between his toes on his left foot, and assumed he had been shocked at work, at first. (3/10/21, Admission Note of S. Stewart, D.O. A177; J. Bolling Affid. A375)⁵

However, Zac, who had just suffered a prolonged respiratory and cardiac arrest, was confused about the details and who he was working with, so Zac and his wife came to believe his employer that he was not shocked. (J. Bolling Affid. A376) She even texted what Zac said to the doctors about getting shocked to the employer on 3/11/21, the day after his collapse. (J. Bolling Affid. A376) She suggested to the employer that his finger mark was him maybe smashing it or something, not a shock entrance mark. (J. Bolling Affid. A376)

Incredibly, Jessica and Zac were **not** told by the employer what Service Electric knew within hours of Zac's collapse – that there was voltage found on that line Zac was holding and that his foreman Boggs also got shocked when he grabbed that line. (J. Bolling Affid. A376) Had Jessica been told that promptly, she would have made sure the hospital and doctors knew it. (J. Bolling Affidavit A376) The hospital was operating on the assumption that he might have had a medication reaction or a seizure or his heart failed for no reason. (J. Bolling Affid. A376)

⁵ Many times, but not always, an electrical shock will leave entrance marks at the site of the contact and exit marks on the body toward the ground level. (See *Electrical cardiac injuries: current concepts and management*, Waldmann, Victor et. al, *European Heart Journal*, Volume 39, Issue 16, 21 April 2018, Pages 1459–1465, <https://doi.org/10.1093/eurheartj/ehx142>.) There may or may not be electrical burns at the sites. (See *Electrical injuries: neurologic complications*, K.K. Jain, M.D., *Medlink Neurology*, October 27, 2020, <https://www.medlink.com/articles/electrical-injuries-neurologic-complications>.)

In the days that followed, Jessica texted Zac's employer about what was going on with Zac in the hospital. (J. Bolling Affid. A376) On March 13, 2021, three days after his injury, she explained that they were waiting for a heart MRI and Zac may have to stay until the following week to get the results because they couldn't figure out what would make a healthy 25-year old's heart stop. (J. Bolling Affid. A376) She told the employer that the doctors were going to put an implant in Zac, since they did not know the cause and in case it would happen again. (J. Bolling Affid. A376) Again, nothing was mentioned by the employer about what happened with Freddie Boggs or the voltage on the line. (J. Bolling Affid. A376)

Again on March 15, 2021, Jessica texted the employer, saying that the doctors had run all tests they could think of and still couldn't figure out why a 25-year-old would just die. (J. Bolling Affid. A376) She also told him the doctors said to her that they did not think it was his anxiety medications that caused it without other issues that would have showed up on the scans, but didn't. (J. Bolling Affid. A376) Jessica texted the employer specifically, that the doctors keep asking if he's sure he didn't get shocked, and that was the only thing that made sense. (J. Bolling Affid. A376) But Jessica and Zac told the doctors they did not think so because of what they were told by the employer and because they were not told about Boggs getting shocked and voltage on the line. (J. Bolling Affid. A376) Jessica texted the employer that she was having a hard time keeping it together and did not want to take Zac home without knowing what is wrong and him die. (J. Bolling Affid. A376) Again, there was no mention from the employer about what happened with Boggs or the voltage found on the line. (J. Bolling Affid. A376) This is reprehensible behavior on the part of the employer.

Zac and Jessica did not find out about what happened with Freddie Boggs and there being voltage on the line until Zac went back to work on trial light duty in April, when co-worker Jason Bryant told him. (Bryant Stmt A373; J. Bolling Affid. A376) The employer's failure to tell Jessica and Zac about what happened with Freddie Boggs getting shocked and there being voltage on the line left them and the hospital and doctors in the dark, and Zac left the hospital with no determination of what caused his heart to stop. (J. Bolling Affid. A376) **Zac had to have a loop implant surgery to record his heart since they did not know for certain what the cause was.** (J. Bolling Affid. A376)

Once the cardiologist learned what really happened, he determined that Zac suffered an electric shock at work. (See Musser Affid. A378-79) In his affidavit, Dr. Musser explained:

2. I provided consultation and evaluation of Zachary Boiling during his admission to Carillon Roanoke Memorial Hospital in March of 2021. Zachary Bolling was admitted following a collapse at work while holding a power line, with cardiac and respiratory compromise and the on-site use of an AED-automated external defibrillator.

3. During the hospital admission, I was not advised that subsequent to the collapse of Zachary Boiling, another person was shocked later that day while holding the same power line, and thereafter the line was measured to have 600 volts on it. The patient's wife was told and reported that the line was grounded and others were working on the line.

4. Therefore, I performed a significant amount of testing to attempt to determine the source of Zachary Boiling's cardiac compromise. None of those tests showed a structural reason for the cardiac event suffered by Mr. Bolling. Because we were unable to confirm the source of the cardiac compromise, I surgically placed an implantable loop recorder, in order to record any future events to assist in determining the source. The cause was not determined upon his discharge and no life-threatening arrhythmias have been observed following placement of the implantable loop recorder.

5. Having received and reviewed additional information, including portions of a deposition of Freddy Ray Boggs, portions of a deposition of Shawn Fisher, and the sworn statement of Jason Bryant, I learned of the shock that occurred to Mr. Boggs and the measurement of 600 volts. Based upon this additional information, the lack of other structural abnormality to account for the cardiac event, and considering the patient's relevant medical history, and further based upon my professional training and experience as a Cardiac Electrophysiologist, **it is my professional opinion that Zachary Bolling sustained an electric shock and this was the cause of his cardiac and respiratory event on March 10, 2021**, and necessitated his hospital admission, subsequent treatment and clinic follow-up, and his missed work from the date of his injury through April 6, 2021, and from April 15, 2021 through June 15, 2021. (emphasis added.)

III. SUMMARY OF ARGUMENT

The Board of Review correctly found that twenty-five-year-old Zachary Bolling sustained a serious electrical shock during the course of his employment on March 10, 2021, while holding a transmission power line. The shock stopped his heart and his respirations, and he had to be shocked by an on-site AED in order to be resuscitated. While the employer represented that Zac was not shocked because the line was grounded and others were working on the same line, an investigation of the incident that day revealed that his foreman, Freddie Ray Boggs was shocked later that same day when he grabbed the same power line. In addition, testing done by the foreman of that line after the claimant and the foreman were both shocked, showed that it had 600 volts of electricity on it. Nevertheless, neither the

claimant, nor his wife were told this critical information by the employer, which left them and their medical providers scrambling to find a reason why Zac's heart stopped. Zac had to have an implanted heart monitor as a result. Then his claim was improperly denied.

A non-hired, Board Certified, Mayo Clinic trained cardio-electrophysiologist determined that Zac suffered from an electrical shock at work. His determinations of the cause of the claimant's cardiac event outweighed the equivocal opinions of the employer's less qualified, hired experts. While the employer argues that Zac had a medication reaction, the cardiologist determined that Mr. Bolling's cardiac testing did not support medications as the cause of Mr. Bolling's cardiac failure because he did not have the findings a cardiologist would see on EKG if the medications were the cause.

Importantly, the Board of Review made findings of fact that were supported by the weight of the evidence of record. The findings of fact made by the Board were not clearly wrong, and its decision was not arbitrary, capricious, an abuse of discretion or based upon any error of law. The employer simply picks its favored interpretation of select evidence, ignores other evidence, and argues that this Court should reweigh the evidence essentially *de novo* and make different findings of fact. This is not the Court's role on appellate review. As such, the employer has failed to meet its heavy burden on appeal. The overwhelming weight of the evidence shows that Zac was indeed shocked on the job. His claim was properly deemed compensable by the Board of Review and the order should be affirmed.

IV. STATEMENT REGARDING ORAL ARGUMENT

The claimant does not wish to delay proceedings in his claim. Therefore, the claimant does not believe that oral argument is necessary in this matter under W.V.R.App.P. 18, given the briefing and record on appeal. The employer did not specify if it desired a Rule 19 or Rule 20 oral argument or whether it believes a memorandum decision is appropriate. If the employer's request for oral argument is granted, a Rule 19 argument would be sufficient as the factual determinations here would not meet the Rule 20 criteria. If the employer's request for oral argument is granted, claimant likewise would request to be heard, as well.

V. ARGUMENT

A. The employer's failure to tell the claimant and his wife what happened led to denial of his claim.

The employer's failure to tell Jessica and Zac about what happened with Boggs getting shocked and the voltage on the line left them and the doctors in the dark, and Zac left the hospital with no determination of what caused his heart to stop. Zac had to have a loop implant surgery to record his heart since they did not know for certain what the cause was. (J. Bolling Affid. A376)

While the conduct of the employer is not at issue in a Workers' Compensation claim, it is relevant here because it interfered with the claimant receiving an accurate diagnosis and ultimately led to the denial of his claim. The claim file obtained from the claims administrator has the texts Jessica sent to the employer, but there was zero documentation produced from the file about the fact that the foreman was shocked the same day on that line and the fact that there were 600 volts measured on it. The employer argues that the claim denial should be affirmed because the doctors did not conclusively determine that Zac was shocked when he was in the hospital (Dr. Musser later did determine this). However, the employer should not be able to benefit from a situation it improperly and arguably fraudulently created by withholding critical information from the claimant about the circumstances surrounding Zac's injury.

B. The claimant exhibited and suffered from classic signs of an electrical shock.

The employer argues that Zac passed out or experienced a seizure from some past medical issue, or had a medication reaction which caused his heart to stop and his respiratory failure at age twenty-five.⁶ However, Zac exhibited classic signs of an electric shock. It is known that electrical current at high enough levels causes tetanic muscle contraction that can make the victim unable to let go of the energy source. (Waldmann, *supra*.) This occurred with Zac, as described by witnesses. (Boggs A266, 273,285; Bryant Stmt. A372) Furthermore, an immediate sequelae of an electric shock is loss of consciousness. (See *Electrical injuries: neurologic complications*, K.K. Jain, M.D., *Medlink Neurology*, October 27, 2020, <https://www.medlink.com/articles/electrical-injuries-neurologic-complications>.) It is well known

⁶ Zac had a history ADHD and anxiety attacks and was taking medication for it at the time of his shock. However, anxiety attacks do not cause a person's heart to stop or cause respiratory arrest. He had a head injury from a motor vehicle wreck in the past and for a time felt faint. They determined it was likely anxiety. (Z. Bolling Dep. A347-8) Even if not, this would not cause a person's heart to stop.

that electrical shocks often affect the heart, with two major complications being cardiac arrhythmias and myocardial tissue injuries, which can occur with a hand to hand or a hand to foot electrical pathway. (*See Electrical cardiac injuries: current concepts and management*, Waldmann, Victor et. al, *European Heart Journal*, Volume 39, Issue 16, 4/21/18, Pages 1459–1465, <https://doi.org/10.1093/eurheartj/ehx142>.) It can also cause other conduction disturbances like sinus bradycardia or standstill, bundle-branch blocks, and atrioventricular blocks. (*See Waldmann, supra.*)

Even a low voltage shock can be fatal causing ventricular fibrillation, and even very short contact can cause cardiac arrest. (*Waldmann, supra.*) Most arrhythmias occur soon after the electrical shock, but can also be delayed. (*Waldmann, supra.*) Generally, 20 milliamps cause muscle tetanization, 20–50 milliamps cause paralysis of respiratory muscles and respiratory arrest, with increasing milliamps leading to ventricular fibrillation threshold and cardiac standstill. (*See Waldmann, supra,* and *Jain, supra.*) It is further known that respiratory arrest and respiratory failure can occur immediately following electrical shock from inhibition of the medullary respiratory center in the brain or prolonged paralysis or tetanic contraction of the diaphragm or other respiratory muscles. (*See, Waldmann, supra,* and *Jain, supra.*) Neurologic complications of electrical injuries also include seizures, convulsions or tremors. (*See Jain, supra.*) **Thus, the things that occurred with Zac are known signs and sequelae of electrical shock.**

C. The claimant’s treating cardiologist determined that the claimant suffered an electrical shock.

Zac was seen at the hospital and afterward by cardiologist Carl Musser, M.D. Dr. Musser is a Cardiac Electrophysiologist and the Medical Director of Heart Rhythm Services for Carilion Clinic Cardiology. He graduated from Wake Forest University School of Medicine, completed his residency at the Mayo Clinic, and completed a fellowship at the Dartmouth-Hitchcock Medical Center. He is also an Assistant Professor of the Virginia Tech Carilion School of Medicine. He is Board Certified by American Board of Internal Medicine in Cardiac Electrophysiology and Cardiovascular Disease. (Affid. Musser A378-79)

It bears repeating that in his affidavit, Dr. Musser explained:

2. I provided consultation and evaluation of Zachary Boiling during his admission to

Carillon Roanoke Memorial Hospital in March of 2021. Zachary Bolling was admitted following a collapse at work while holding a power line, with cardiac and respiratory compromise and the on-site use of an AED-automated external defibrillator.

3. During the hospital admission, I was not advised that subsequent to the collapse of Zachary Bolling, another person was shocked later that day while holding the same power line, and thereafter the line was measured to have 600 volts on it. The patient's wife was told and reported that the line was grounded and others were working on the line. ...

5. Having received and reviewed additional information, including portions of a deposition of Freddy Ray Boggs, portions of a deposition of Shawn Fisher, and the sworn statement of Jason Bryant, I learned of the shock that occurred to Mr. Boggs and the measurement of 600 volts. Based upon this additional information, the lack of other structural abnormality to account for the cardiac event, and considering the patient's relevant medical history, and further based upon my professional training and experience as a Cardiac Electrophysiologist, **it is my professional opinion that Zachary Bolling sustained an electric shock and this was the cause of his cardiac and respiratory event on March 10, 2021** (Emphasis added.)

While the employer argues that Zac had some sort of medication reaction, Dr. Musser was aware of Zac's prior medical history and medications. Nevertheless, Dr. Musser determined, based upon all the facts and his education, training and experience, that the cause of Zac's collapse was an electric shock. (A323-8)

The employer cites several portions of the initial hospitalization record, where various physicians and residents made commentary about potential causes of Zac's cardiac collapse. However, these comments were made without knowledge that the foreman had been shocked and measured 600 volts on that same line because the employer failed to notify the claimant or his wife about it. Therefore, all of these comments were made without knowledge of critically important facts. Once those facts came to light, the physician in charge of his care at the hospital, Dr. Musser, determined Zac suffered an electrical shock. The Board was not clearly wrong or arbitrary in relying upon the determinations of Dr. Musser under these facts and with his superior qualifications and experience.

D. The weight of the evidence shows that the claimant suffered an on-the-job electrical shock.

The employer argues that the second shock and measured voltage on the line was hours after the injury, so it could have been electrified at some point after Zac collapsed. This argument, like its other arguments, are not convincing given all of the facts that have come to light. The overwhelming weight of the evidence shows that Zac was indeed shocked on the job. His claim should be approved.

The employer makes much of the fact that, before Zac was shocked, the lineman in the bucket truck tested the line *while it was still in the air and grounded higher up to the tower* and the voltage measured zero. The employer ignores the fact that, after the lineman in the bucket tested the line, *the line was then disconnected from the tower ground* because the line was not long enough to lower to the dirt level and stay connected to the tower. It was then hooked to the rod that was not sufficiently deep enough in the rocky soil. Therefore, the line when tested by the lineman in the bucket was in an entirely different situation than when that line shocked Zac.

The employer further tries to muddy the water by confusingly stating the facts, implying that that grounding was changed to the base of the tower *after* Zac was shocked but *before* the foreman was shocked. However, the AEP investigation report shows that the change in the grounding to the base of the tower was done *after* Zac and his foreman were shocked and *after* the foreman measured 600 volts on that line. (AEP Rpt. A178-83) The fact is, when the foreman was shocked and when he subsequently measured the 600 volts, the line was set up the same way it was when Zac was shocked.

The Board of Review was not clearly wrong or arbitrary in determining that these facts, even if disputed by the employer, supported a finding that Zac sustained an electrical shock.

E. The employer submitted mostly equivocal reports that were unconvincing and did not carry the preponderance of the evidence.

The employer submitted reports that were not convincing. First, it submitted the report of ChuanFang Jin, M.D. Dr. Jin is not a cardiologist. Treating cardiac electrophysiologist Dr. Musser is better qualified to determine the cause of a cardiac arrest than Dr. Jin. Second, Dr. Jin never examined Mr. Bolling, compared to Dr. Musser, who treated Mr. Bolling in and out of the hospital. Third, Dr. Jin's report is entirely equivocal. Dr. Jin opined:

Even though the exact etiology of the syncope is *not completely clear*, non-cardiac cause is *suspected*. His initial presentation was described as "seizure-like activity" *suggestive* of clinical impression of seizures even though the cause of this seizure is *not completely clear*. (Jin A186)

While he later opines that more likely than not the claimant "probably" had a seizure that led to his cardiac arrest, his opinions are based on this equivocal reasoning. Dr. Jin's "suspected," "suggestive" and

“not completely clear” opinions are not sufficient to carry the weight of the evidence. They would be excludable in a civil case. They do not meet a preponderance of the evidence standard in this Workers’ Compensation claim and should be disregarded.

Mr. Bolling’s EKG at the hospital showed a right bundle branch block. Dr. Jin made the statement that, “Even other types arrhythmia can be seen though I did not find RBBB [right bundle branch block] has been reported.” Dr. Jin wished to imply, without actually opining, that electric shocks cannot cause right bundle branch blocks. If Dr. Jin could not find it, he could not have looked very hard. “Conduction disturbances, like sinus bradycardia or standstill, **bundle- branch blocks** or various degrees of atrioventricular blocks can occur following electrical shocks.” *Electrical Cardiac Injuries: Current Concepts and Management*, European Heart Journal, Vol.39, Issue 16, 4/21/18, pp. 1459-1465.

Compare Dr. Jin’s implications and not completely clear opinions to the opinions of better qualified, treating and examining cardiologist Dr. Musser: “as a Cardiac Electrophysiologist, it is my professional opinion that Zachary Bolling sustained an electric shock and this was the cause of his cardiac and respiratory event on March 10, 2021.” (A378-379) The Board was not clearly wrong or arbitrary to find that Dr. Musser was better qualified and his determinations were more credible and reliable than Dr. Jin’s.

Let’s next address the employer’s engineer’s report. The engineer opines that: “Induced voltage is indeed a real phenomenon; however, all of the cases that I am familiar with occur with active transmission lines.” (Averrett A200) The engineer then assumes that it could not have been induced voltage on the line because there is no induced voltage when the conductors are properly isolated from the generating source. **Even if it were true that there cannot be induced voltage unless there are active transmission lines⁷, then the employer’s engineer has supported the claimant’s position that the**

⁷ It isn’t true, based upon cursory research on induced voltage. (See Voice of Experience: Understanding Induced Voltage, Danny Raines, Safety Management Voice of Experience, June 12, 2018, <https://incident-prevention.com/blog/voice-of-experience-1-3>, explaining induced voltage is electricity that can occur on a de-energized power line, due to electromagnetic fields from surrounding lines or even from power a long way down a line; Fisher A231, 239.) Because the employer submitted its reports at the very end of the third time frame extension, and the claimant was going without needed treatment due to his private insurance refusing to pay for his care because *his private insurance determined it was a work injury*, the claimant could not afford another extension to produce a rebuttal expert to correctly explain the concepts.

lines were not properly isolated or grounded. Otherwise, according to him, there would have been no voltage on that line, and their engineer *admits* that there was measured voltage on that line: “the fact remains there is corroborating testimony of approximately 600v being measured on the conductor approximately three hours after the incident.” (Averrett A200) Second, the investigation report from AEP contradicts the employer engineer’s opinion, concluding “there was a measurable amount of **induced voltage (500v-600v)**” on the line. (AEP Rpt. A180) The Board of Review was not clearly wrong or arbitrary in finding that Zac sustained an electric shock based upon the concessions of the employer’s engineer.

The employer’s engineer’s opinions are just as equivocal as Dr. Jin’s opinions. The engineer opines: “Because this same scenario could not be replicated the following morning **raises a question in my mind of whether or not there was detectable voltage on the line at the time of the incident.**” (Averrett A200-201) A “question raised in his mind” is not sufficient to carry the preponderance of the evidence. Likewise, this opinion would be excludable in a civil case, does not meet a preponderance of the evidence standard in this Workers’ Compensation claim, and it should be disregarded.

The employer’s engineer goes on to opine that, if Mr. Bolling was indeed shocked by the measured 600v there would have been physical evidence of the shock on his body in the form of an entry and exit wound. (Averrett 201) This is also false.⁸ Assuming entry and exit wounds were required, the claimant submitted the March 11, 2021, progress note of Sara Stewart, D.O., who examined Mr. Bolling in the hospital:

Spoke with nursing who reported that patient and patient's wife told nursing he was electrocuted leading to admission. Spoke with patient and his wife, both report that the patient was working on a line that was not grounded and he felt a shock go in to his left index finger, flinched and then his elbow on the line before he went down. Events after that he reports are unclear. He does not remember the AED. Wife confirms story. **On physical exam left index finger has noted dried blood in the paronychia, a 2cm region of erythema over the left olecranon, and a 2cm lesion in the toe webspace on the left foot between the 4th and 5th digit.** (A177)

⁸ Aside from published literature discussed above that explains entrance and exit wounds are not required, this fact is supported by evidence *in this very case*, where the foreman Boggs testified that he was shocked on that same line and measured 600 volts on it, yet he did not mention having any entrance or exit wound in his deposition.

To the extent that an entrance and exit wound were required, which they are not, Zachary Bolling had them, as observed on examination by a physician while he was in the hospital. It does not appear that the employer's engineer had this evidence, since he did not mention it, or he ignored it. At best, his opinion is impeached by the documentary evidence.

The employer argues that the entrance wound on his finger may have occurred at some time prior to the event. This would not explain the 2-centimeter exit lesion in his toe webspace or explain the 2 cm area on his left olecranon (elbow). It would not explain the dried blood on his finger, which would have been washed off if he had injured days before. Even if the employer argues that the entrance wound on his finger happened some time prior to, it is not clearly wrong or arbitrary to find that, more likely than not, those were entrance and exit wounds, even assuming they are required, which they are not.

Their engineer opined that, if Mr. Boiling was indeed shocked and other crew members were holding onto the conductor, they would have received some shock as well, as the current would "split proportional to the resistance." (A201) There are too many unknowns for the engineer to credibly opine this and his statement is oversimplified. First, it is not determined whether the others had resistance that was different than that of Zac, since clothing, footwear, differences in moisture on the dirt where each was standing, whether the person was standing primarily on rock or dirt, and even sweating can all affect a person's conduction. Location on the line is important, and Zac was the closest to the improperly grounded rod. As the person closest to the poorly grounded rod, Zac was more at risk of becoming the ground himself.

Most importantly, as confirmed by the foreman, Zac was the only person who had ahold of a rigging cable which had a large grip attached to it, which attached to a steel choker on a nearby dozer and so Zac was the only one who had the rigging cable and the transmission line, which creates a much larger conduction path to ground when the rod itself is not doing its job. (Bryant Stmt. A372; Boggs A266, 288) The others only had ahold of the transmission line. (Boggs A288) *See also*, Dep. of cardiac electrophysiologist Musser, A319: "So depending on how the individuals are situated relative to where the current was coming from, their contact with the ground -- current is going to flow through the -- the

electrical least resistive path, so -- in which case there would not necessarily be a -- you know, a similar amount of current that -- that is experienced in each individual.”

Regardless, all of these unknowns are not sufficient to overcome the absolute and *known* fact—that the foreman was shocked later that same day while grabbing the same line and measured 600 volts on it. This strong and uncontroverted evidence trumps all of the unknowns and conjecture of the employer’s experts.

Finally, their engineer concludes, contrary to the cardiologist, that most likely Mr. Bolling “suffered from an underlying health condition.” (Averrett A201) The engineer is not qualified to make this opinion and, therefore, this opinion must be disregarded.

Likely recognizing the weaknesses of its two reports, the employer hired a last minute, second occupational medicine doctor, Marsha Bailey, who also never examined Zac. Dr. Bailey is the same type of physician as Dr. Jin. This begs the question, why didn’t the employer go back to Dr. Jin for additional opinions? It is likely because Dr. Jin already stated an opinion that lacked the clarity required. Moreover, why didn’t the employer present an opinion from a cardiologist for causation of a *cardiac* event? The employer has very experienced counsel, who would surely attempt to match the superior qualifications of Dr. Musser. The fact that the employer submitted a second occupational medicine report says more about the employer’s inability to find a cardiologist who would say what it needed, and the employer’s need to fall back on its favored, nearly exclusively employer-insurance company expert, Dr. Bailey.⁹

Whatever the reason, Mayo Clinic, Dartmouth trained cardiologist Dr. Musser is better qualified to determine the cause of a cardiac arrest than Dr. Bailey. Second, Dr. Bailey never examined Mr. Bolling, compared to Dr. Musser, who treated Mr. Bolling in and out of the hospital. Also, Dr. Bailey claimed that there was no record of entrance and exit wounds, A194, when there were, as explained above. Like the employer’s engineer, Dr. Bailey’s opinion is impeached by the documentary evidence.

Dr. Bailey attributed Mr. Bolling’s heart stoppage to an unintentional overdose of his prescribed medications, because Vyvanse and Adderall/phentermine (an amphetamine) are stimulants and

⁹ The differences in the opinions of the employer’s occupational medicine doctors should also be noted. How is the record “not completely clear” to one of the employer’s experts and “strong” to the employer’s other expert?

amphetamine was found in his urine screen. (Bailey Rpt. A197) There is not sufficient evidence in the record to show that Zac had a toxic level overdose of his prescriptions in his body sufficient to cause cardiac failure. The urine toxicology screen did not measure the amount of medication in his urine, it only screened for “positive” with a level of over 500 ng/mL. (See Carilion Clinic records A56) 500 ng/mL is not a high amount for a therapeutic dose of the medication. Studies show that peak urinary amphetamine ranges from 620 to 3160 ng/mL following 5-mg doses, and Zac was previously prescribed a higher dose. *See Urinary excretion of d-amphetamine following oral doses in humans: implications for urine drug testing*, J Anal Toxicol. 1998 Oct;22(6):481-6. doi: 10.1093/jat/22.6.481, A. Poklis et. al., <https://pubmed.ncbi.nlm.nih.gov/9788523>. An amount of 3,400 ng/mL is considered a compliant and expected positive amphetamine result. *See Clinical Update: June 2019 What Did My Patient Actually Take? An Overview of Amphetamine Results*, Aegis Science Corporation. <https://www.aegislabs.com/resources/clinical-update/jun2019>. Thus, it is expected that Zac would test positive for amphetamine and there is no evidence that he had an overdose of it. This is evidenced by the fact that the hospital did not do a level measurement to determine the amount of ng/mL of the medication in his urine or blood, which they would have done if overdose was the suspected as the cause.

More important, while Dr. Bailey opined that it was the interaction of his new medication with his other medication that caused his cardiac failure, Dr. Musser explained:

A So there is a -- a very **uncommon** -- which was part of the evaluation that I did where the one of the measurements on the electrocardiogram called the QT interval can be affected by the combined use of those two medicines, which -- it's called the QTC, which represents the -- the time it takes the heart to recharge in between beats, and -- and in the most severe cases can lead to life-threatening arrhythmias.

Q Okay.

A **We did not see any evidence of that on Mr. Bolling's EKGs.**

(Dep. Musser A310) **Thus, the cardiologist determined that Mr. Bolling's cardiac testing did not support medications as the cause of Mr. Bolling's cardiac failure because he did not have the findings a cardiologist would see on EKG if the medications were the cause.** Dr. Bailey did not address this in her report, even though the deposition of Dr. Musser occurred before her report was prepared. Really, she is not even qualified to address it. Again, her opinion is impeached by the

documentary EKG evidence. Remember that Dr. Musser was aware of Zac's prior medical history and medications. Nevertheless, Dr. Musser has determined, based upon all the facts and his education, training and experience, that the cause of Zac's cardiac collapse was an electric shock, not medications, and his determination is supported by the objective testing. (Dep. Musser, A327-328). The Board was not clearly wrong or arbitrary in following the determinations of Dr. Musser, over the opinions of Dr. Bailey which were contradicted by the objective EKG evidence.

F. The claims administrator most likely believed the claim should have been approved.

The claimant submitted into evidence an April 20, 2022, order from Helmsman Management, administrator for the employer's insurer. The order and attached medical card approved a claim for Zachary Bolling. (Supp. Appx. 8-9) First, the RE: of the order approving the claim states as follows:

RE: Employee: ZACHARY BOLLING
Employer: QUANTA SERVICES, INC
Claim #: WC80D-F61248
Injury: No Physical Injury – Syncope
Date of Injury: 03/10/22
Date of Report: 04/18/2022

The attached medical card leaves blank the "Nature of Injury" section. Counsel for claimant contacted Pamela Briscoe, the Claims Officer who authored the April 20, 2022, order because the injury listed was incorrect. The RE: for injury incorrectly states, "Injury: No Physical Injury – Syncope." Of course, Zachary Bolling sustained an on-the-job electric shock injury and sequelae of that electric shock, which can include syncope, cardiorespiratory arrest and cognitive sequelae, all of which Zac suffered. Counsel for claimant called with the intent to explain that the diagnosis needed to be amended to electric shock injury and sequelae of electric shock. However, the Claims Officer said that the April 20, 2022, order was entered in error, and that this was a duplicate of a prior claim with a different claim number, with a different Claims Officer, and the order should not have been sent out. Note that the RE: states that the Date of Report [of the injury] was April 18, 2022, which is recent.

So, if the April 20, 2022 order really was sent in error, why is it relevant here? It is relevant because, **what most likely occurred is that Claims Officer Briscoe thought that this was a new claim**

reported, gave it a new claim number, looked at the evidence and decided that the claim should be approved. After, she most likely found out that the claim had previously been denied. Therefore, this order supports the premise that even the employer's claims officer believed the claim should be approved. Even if this is not the case, the order is relevant because, once the claim would be ruled compensable by the Board, it was likely that Helmsman would approve it only for syncope. This would force the claimant into unwarranted, additional delay and expense in relitigating the proper diagnosis after spending well over a year litigating compensability and doing without needed treatment.¹⁰ Therefore, the Board correctly ruled his claim compensable for electrical shock and sequelae of electrical shock.

G. The employer has not met its heavy burden on appeal.

The Board properly weighed the evidence and made findings of fact that are supported by documentation and testimony in the record and within its discretion. In this appeal, the employer is required to show that the Board's factual findings were clearly wrong, arbitrary and capricious, or that the Board abused its discretion in making its factual determinations. §23-5-12a. Instead, the employer picks its favored interpretation of select evidence, ignores other evidence, and argues that this Court should reweigh the evidence essentially *de novo* and make different findings of fact in its favor. This is not the Court's role on appellate review. As such, the employer has failed to meet its heavy burden on appeal.

VI. CONCLUSION

WHEREFORE, the claimant/respondent, Zachary Bolling, respectfully requests that the October 3, 2022 Board of Review order be affirmed.

ZACHARY BOLLING,
Respondent/Claimant below, by Counsel.

/s/ Kelly Elswick-Hall
Kelly Elswick-Hall (W.V. Bar No. 6578)
The Masters Law Firm llc

¹⁰ As illustrated in *Best Buy v. Parrish*, No. 15-1153, 2016 WL 7105264 (W. Va. Dec. 6, 2016), the claims administrator approved the claim for the diagnosis of foot crush injury. On appeal, the OoJ determined that the diagnosis of complex regional pain syndrome should also be compensable based on the evidence which included treating physicians opining the claimant suffered from this condition. *Id.* at *2. So, the OoJ added this additional diagnosis even when the claimant had not formally requested it on a diagnosis update form, and our Supreme Court affirmed. This decision emphasizes that the OoJ (now Board of Review) had the statutory authority to modify the order of a claims administrator with the correct diagnoses pursuant to W. Va. Code § 23-5-9(d) (2007). *See James A. Moore, Jr. v. ICG Tygart Valley, LLC*, No. 20-0028 (April 28, 2022).

STATE OF WEST VIRGINIA
INTERMEDIATE COURT OF APPEALS

QUANTA SERVICES, INC.,
Petitioner/Employer.

App. No.: 22-ICA-244
JCN: 2021018967
CCN: 80DF08911
DOI: 3/10/21

v.

ZACHARY BOLLING,
Respondent/Claimant,

I, Kelly Elswick-Hall, counsel for the claimant/respondent, do hereby certify that copies of the foregoing “**BRIEF OF RESPONDENT**” and “**SUPPLEMENTAL APPENDIX**” were served upon the parties of record this 30th day of November, 2022, by forwarding a true copy thereof through the File & Serve Xpress e-filing system, to the following:

Daniel G. Murdock
Fogle Keller Walker, PLLC
300 East Main Street, Suite 400
Lexington, KY 40507

/s/Kelly Elswick-Hall
Kelly Elswick-Hall (W.V.S.B. 6578)