FLORIDA PUBLIC SERVICE COMMISSION
OFFICE OF COMMISSION CLERK

DOCUMENT NUMBER ASSIGNMENT*

FILED DATE: 10/29/2020

DOCKET NO.: 20200001-EI

DOCUMENT NO.: 11601-2020

DOCUMENT DESCRIPTION:

(CONFIDENTIAL) Amended Final Order PSC-2020-0368A-FOF-EI establishing fuel cost recovery for Duke Energy.

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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Fuel and purchased power cost recovery clause with generating performance incentive factor.	DOCKET NO. 20200001-EI ORDER NO. ISSUED:

CONFIDENTIAL

The following Commissioners participated in the disposition of this matter:

GARY F. CLARK, Chairman
ART GRAHAM
JULIE I. BROWN
DONALD J. POLMANN
ANDREW GILES FAY

AMENDED FINAL ORDER ESTABLISHING FUEL COST RECOVERY FOR DUKE ENERGY FLORIDA, LLC.

BY THE COMMISSION:

I. BACKGROUND

Docket No. 20190001-EI, *In re: Fuel and purchased power cost recovery clause with generating performance incentive factor*, referred to as the Fuel Clause, was opened on January 2, 2019. The Fuel Clause is a perennial docket closed, reopened, and renumbered every year in which the Commission processes all petitions filed by investor-owned electric utilities seeking to recover the cost of fuel and fuel-related activities needed to generate electricity.

A. Prehearing proceedings before the Commission

Duke Energy Florida, LLC (DEF) is an investor-owned electric utility operating in the State of Florida. DEF reaffirmed its party status in Docket No. 20190001-EI on January 3, 2019. Likewise, the Office of Public Counsel (OPC), authorized by Section 350.0611, Florida Statutes (F.S.), to provide legal representation to Florida electric utility customers before the Commission, reaffirmed its party status in Docket No. 20190001-EI on January 4, 2019. The Florida Industrial Power Users Group (FIPUG), an association of utility customers who consume large amounts of electricity, and White Springs Agricultural Chemicals, Inc., d/b/a PCS Phosphate – White Springs (PCS Phosphate), a fertilizer company, reaffirmed their party status on January 4, 2019 and January 15, 2019, respectively.

We issued Order No. PSC-2019-0059-PCO-EI on February 13, 2019, establishing the procedures to be followed. On March 1, 2019, DEF filed its Petition for approval of fuel cost recovery and capacity cost recovery with generating performance incentive factor actual true-ups for the period ending December 2018. At that time DEF also filed the direct testimony of Jeffrey

Swartz which incorporated Exhibit JS-1, filed in the 2018 Fuel Clause. On September 13, 2019, OPC filed the direct testimony and exhibits of Richard A. Polich, non-confidential Exhibits RAP-1 through RAP-2, and confidential Exhibits RAP-3 through RAP-9. On September 26, 2019, DEF filed the rebuttal testimony of Jeffrey Swartz with confidential Exhibits JS-2 through JS-4.

A Prehearing Conference was held on October 22, 2019, and Prehearing Order No. PSC-2019-0466-PHO-EI was issued on October 31, 2019. At that time two issues associated with the testimony of witnesses Swartz and Polich were identified: Issues 1B and 1C. Issue 1B and 1C state as follows:

> Issue 1B: Was DEF prudent in its actions and decisions leading up to and in restoring the unit to service after the February 2017 forced outage at the Bartow plant, and if not, what action should the Commission take with respect to replacement power costs?
>
> Issue 1C: Has DEF made prudent adjustments, if any are needed, to account for replacement power costs associated with any impacts related to the de-rating of the Bartow Plant? If adjustments are needed and have not been made, what adjustment(s) should be made?

B. Evidentiary proceedings before the Division of Administrative Hearings

It became readily apparent that large portions of the testimony and exhibits of both witnesses Swartz and Polich associated with these issues, as well as the Commission staff's proposed trial exhibits, were highly confidential in nature. This fact made it impossible to conduct meaningful direct or cross examination without reference to, and discussion of, confidential material. The only way to conduct a hearing based substantially on confidential material would be to close the hearing to the public. Because we must conduct all proceedings in the sunshine under the law,[1] we do not have the ability to close a hearing, even one which deals extensively with confidential materials and testimony. Therefore, in order to maintain the confidentiality of these materials, we referred DEF Bartow Unit 4 Issues 1B and 1C to the Division of Administrative Hearings (DOAH) on November 8, 2019.

Administrative law judge (ALJ) Lawrence P. Stevenson conducted a closed final evidentiary hearing on February 4-5, 2020. At the hearing, DEF presented the confidential testimony of Jeffrey Swartz, with his prefiled direct and rebuttal testimony inserted into the record as though read. DEF's Exhibit Nos. 80-82 were admitted into evidence. OPC presented the confidential testimony of Richard A. Polich, with his prefiled testimony inserted into the record as though read. OPC's Exhibit Nos. 68-75, 101-109, and 115-117 were admitted into evidence. Commission staff Exhibit Nos. 110 and 111 were admitted into evidence. FIPUG's Exhibit No. 118 and PCS Phosphate's Exhibit Nos. 112 and 113 were also admitted into

[1] Section 286.011, F.S.

evidence. The revised Comprehensive Exhibit List (CEL) was admitted into evidence by stipulation as Exhibit No. 114.

A three-volume transcript of the final hearing was filed with the Commission Clerk on February 18, 2020, and was provided to the DOAH Clerk on February 24, 2020. DEF, Commission staff, and OPC, jointly with PCS Phosphate and FIPUG, timely filed confidential proposed recommended orders on March 20, 2020. The ALJ issued his Recommended Order[2] on April 27, 2020. A redacted version of the Recommended Order is found in Attachment A to this Final Order.

C. Overview of the Recommended Order

This case involves the operation of DEF's Bartow Unit 4 combined cycle natural gas plant and whether DEF operated the plant prudently from the time it was brought on line in June 2009 until February 2017. Bartow Unit 4 is comprised of a steam turbine manufactured by Mitsubishi Hitachi Power Systems (Mitsubishi) with a gross output of 420 MW connected to four M501 Type F combustion turbines. The steam turbine is an "after-market" unit which was originally designed for Tenaska Power Equipment, LLC (Tenaska) to be used in a 3x1 configuration with three M501 Type F combustion turbines with a gross output of 420 MW. Prior to purchasing the steam turbine, DEF's predecessor, Progress Energy Florida, LLC contracted with Mitsubishi to evaluate the steam turbine design conditions and to update the heat balances for a 4x1 configuration. As required by its contract, Mitsubishi provided revised operating parameters for the steam turbine to meet DEF's 4x1 configuration.

The Bartow plant has experienced five outages since it was brought on line in June 2009: March 2012 (planned), August 2014 (planned), April 2016 (planned), October 2016 (forced), and February 2017 (forced).

In March 2012 during a scheduled outage, DEF discovered that the Type 1 L-0 blades in the low pressure section of the steam turbine were damaged. The Type 1 L-0 blades were replaced with re-engineered Type 1 blades and the plant was operated until August 2014 when the plant was taken out of service to upgrade the L-0 blades to Type 3 blades. The plant came back on line in December 2014 and ran until April 2016 when it was taken off line for routine valve work and L-0 blade inspection. The plant was placed back in service in May 2016 with a revised Type 3 blade and operated until October 2016, when DEF shut the plant down due to excessive vibration and loss of L-0 blade material. In December 2016 the plant was put back in service with the original Type 1 blades, and was taken out of service in February of 2017 due to a blade fragment projectile that traveled through the low pressure turbine rupture disk diaphragm. DEF brought the plant back on line in April 2017 with a pressure plate installed in the low pressure section of the steam turbine, which effectively decreased the output of the plant from 420 to 380 MW. DEF continued to operate the plant with the pressure plates until September 28, 2019.

[2] "Recommended Order" is defined in Section 120.52(15), F.S., as the official recommendation of the ALJ assigned by DOAH or of any other duly authorized presiding officer, other than the agency head or member thereof.

There are two amounts that are associated with the initial prudence question: 1) replacement power costs for the February 2017 outage in the amount of $11.1 million, and 2) May 2017 through September 2019 unit derating[3] costs in the amount of $5,016,782 million.

Petitioner, DEF, has the burden of proving by a preponderance of the evidence, that it acted prudently in the operation of Bartow Unit 4 up to and restoring the unit to service after the February 2017 forced outage. Additionally, DEF must prove by a preponderance of the evidence that no adjustment to replacement power costs should be made to account for the fact that after March 2017, and the installation of a pressure plate, Bartow Unit 4 could no longer produce its rated nameplate capacity of 420 MW. The standard for determining whether replacement power costs are prudent is "what a reasonable utility manager would have done, in light of the conditions and circumstances that were known, or should [have] been known at the time the decision was made."[4]

In his Recommended Order, the ALJ detailed the relevant facts and legal standards required to determine whether DEF acted prudently in its operation of Bartow Unit 4 from June 2009 until February 2017. In his conclusion, the ALJ recommended that this Commission find that DEF failed to demonstrate that it acted prudently in the operation of its Bartow Unit 4 plant and in restoring the unit to service after the February 2017 forced outage, and that DEF should refund a total of $16,116,782 to its customers.

D. Post-Hearing proceedings before the Commission

On May 12, 2020, DEF submitted exceptions to the Recommended Order. OPC, jointly with PCS Phosphate and FIPUG (collectively, the Intervenors), filed a Response to DEF's Exceptions.

We have Jurisdiction over this matter under Sections 120.57, 366.04, 366.05, and 366.06, F.S. As discussed in more detail below, we deny DEF's Exceptions to the Recommended Order and adopt the Administrative Law Judge's Recommended Order as the Final Order.

II. RULINGS ON EXCEPTIONS

A. Standard of Review of Recommended Order and Exceptions

Section 120.57(1)(l), F.S., establishes the standards an agency must apply in reviewing a Recommended Order following a formal administrative proceeding. The statute provides that the agency may adopt the Recommended Order as the Final Order of the agency or may modify or reject the Recommended Order. An agency may only reject or modify an ALJ's findings of fact if, after a review of the entire record, the agency determines and states with particularity that the

[3] "Derating" is the reduction in MW output due to installing pressure plates in place of the L-0 blades in the low pressure section of the steam turbine.
[4] *Southern Alliance for Clean Energy v. Graham,* 113 So. 3d 742, 750 (Fla. 2013).

findings of fact were not based on competent substantial evidence or that the proceedings on which the findings were based did not comply with the essential requirements of law.[5]

Section 120.57(1)(l), F.S., also states that an agency in its final order may reject or modify conclusions of law over which it has substantive jurisdiction and interpretations of administrative rules over which it has substantive jurisdiction. When rejecting or modifying a conclusion of law or interpretation of administrative rule, the agency must state with particularity its reasons for rejecting or modifying the conclusion of law or interpretation of administrative rule and must make a finding that its substituted conclusion of law or interpretation of administrative rule is as or more reasonable than that which was rejected or modified. Rejection or modification of conclusions of law may not form the basis for rejection or modification of findings of fact.[6]

In regard to parties' exceptions to the ALJ's Recommended Order, Section 120.57(1)(k), F.S., provides that the Commission does not have to rule on exceptions that fail to clearly identify the disputed portion of the Recommended Order by specific page numbers or paragraphs or that do not identify the legal basis for the exception, or those that lack appropriate and specific citations to the record.[7] Section 120.57(1)(l), F.S., requires our final order to include an explicit ruling on each exception and sets a high bar for rejecting an ALJ's findings.

B. Rulings on Exceptions to the Recommended Order

DEF Exception to Conclusion of Law 110

DEF takes exception with the ALJ's Conclusion of Law 110, which states:

> 110. DEF failed to demonstrate by a preponderance of the evidence that its actions during Period 1 were prudent. DEF purchased an aftermarket steam turbine from Mitsubishi with the knowledge that it had been manufactured to the specifications of Tenaska with a design point of 420 MW of output. Mr. Swartz's testimony regarding the irrelevance of the 420 MW limitation was unpersuasive in light of the documentation that after the initial blade failure, DEF itself accepted the limitation and worked with Mitsubishi to find a way to increase the output of the turbine to 450 MW.

First, as a general criticism, DEF argues that when weighing the facts presented at hearing, although stating the correct legal standard of review - what a reasonable utility manager should have done based on what he knew or should have known at the time - the ALJ did not apply that standard but instead evaluated DEF's actions from the perspective of what is currently known. DEF states that this type of "hindsight" and "Monday-morning quarterbacking" prudence analysis has been found to be inappropriate under *Florida Power Corporation v. Public Service Comm. (Florida Power),* 456 So. 2d 451, 452 (Fla. 1984).

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[5] Section 120.57(1)(l), F.S.
[6] *Id.*
[7] Section 120.57(1)(k), F.S.

Second, DEF disagrees with the ALJ's conclusion that the 420 MW design point was a limitation on the steam turbine. DEF argues that the record supports the conclusion that the 420 MW design point is a fall out number based on various combinations of operating parameters provided by Mitsubishi. DEF argues that operating within the parameters given by Mitsubishi was prudent given what DEF knew or should have known during Period 1. At that time, DEF contends that there was no reason to believe that increasing the output above 420 MW would damage the unit as long as the operating parameters were complied with. Thus, DEF concludes that the fact that the L-0 blades failed in February 2017 does not mean that the plant operator reasonably should have known that would happen in June 2009.

Third, DEF argues that DEF's compliance with lower than 420 MW output after Period 1 and its request to Mitsubishi for modifications to operate the unit at 450 MW do not logically support the conclusion that DEF agreed the unit originally could not be operated above 420 MW. These actions, according to DEF, allowed the unit to continue to be operated to produce the most power possible while research into the cause of the Period 1 outage was conducted. DEF argues that getting the unit back on line producing as much power as possible is implementation of long standing Commission policy that utilities operate generating units for maximum efficiency. DEF asserts that these actions are not evidence of DEF's acceptance of 420 MW as a limitation on the output of the unit.

Intervenors' Response

Intervenors contend that DEF, while conceding that the ALJ referenced the correct legal standard for prudence review, never explains or demonstrates exactly how the ALJ applied "Monday-morning quarterbacking" to reach any of the conclusions in Conclusions of Law 110. In the determination of what a utility knew or should have known at any past point in time, Intervenors state that there is necessarily a review of contemporaneous prior actions and documents. They contend that that review was done here. Intervenors note that DEF has not argued that there is no competent substantial evidence supporting the ALJ's conclusions in Conclusions of Law 110 and cites nine separate parts of the record that do logically support the ALJ's conclusion that DEF did not act prudently in running the unit above 420 MW in Period 1.

Intervenors further argue that the *Florida Power* case relied upon by DEF is not applicable here for several reasons. In *Florida Power*, the Commission classified "non-safety related" repair work as "safety-related" repair work and then applied the higher standard of care for "safety-related" repair work to determine if Florida Power had conducted the repairs prudently. Finding that the record indicated that the extensive repair work was not *per se* safety-related, the Court found that the Commission could not apply the higher standard of care. *Florida Power,* 456 So. 2d at 451. Intervenors argue that in this case, the facts upon which the ALJ relied regarding the repair of the unit are supported by competent substantial evidence and are not in dispute, nor does DEF argue that the inferences drawn from the facts by the ALJ are unreasonable. Intervenors state that DEF would simply draw different conclusions from the same set of facts, i.e., would have us weigh the evidence differently, an action prohibited by Chapter 120, F.S.

Ruling

DEF is asking us to modify a conclusion of law. When rejecting or modifying a conclusion of law, we must state with particularity our reasons for doing so, and must make a finding that the substituted conclusion of law is as or more reasonable than the one rejected or modified.[8] Rejection or modification of a conclusion of law may not form the basis for rejection or modification of a finding of fact.[9] With respect to DEF's exception to Conclusion of Law 110, DEF has failed to provide an adequate basis for rejecting or modifying the Conclusion of Law, and DEF's exception is therefore denied.

Further, DEF has not raised exceptions to any of the 102 factual findings made by the ALJ in his Recommended Order. As its rationale for not doing so, DEF cites the high standard that must be met to set aside an ALJ's finding of fact.[10] The failure to file exceptions to findings of fact constitutes a waiver of the right to object to those facts on appeal. *Mehl v. Office of Financial Regulation,* 859 So. 2d 1260 (Fla. 1st DCA 2003); *Environmental Coalition of Florida v. Broward County,* 586 So. 2d 1212 (Fla. 1st DCA 1991). Nor has DEF argued that the proceedings conducted by the ALJ that produced those facts did not comply with the essential requirements of law. Thus, for all practical purposes, DEF has accepted all of the ALJ's 102 factual findings.

If the ALJ's findings of fact are supported by competent substantial evidence, the agency may not reject or modify them even to make alternative findings that are also supported by competent substantial evidence. *Kanter Real Estate, LLC v. Department of Environmental Protection (Kanter),* 267 So. 3d 483, 487-88 (Fla. 1st DCA 2019), *reh'g denied* (Mar. 19, 2019), *review dismissed sub nom. City of Miramar v. Kanter Real Estate, LLC,* SC19-636, 2019 WL 2428577 (Fla. June 11, 2019)(citing *Lanz v. Smith,* 106 So. 3d 518, 521 (Fla. 1st DCA 2013)).

Finally, an agency is not authorized to substitute its judgment for that of the ALJ by taking a different view of, or placing greater weight on, the same evidence, reweighing the evidence, judging the credibility of witnesses, or otherwise interpreting the evidence to fit its desired conclusion. *Prysi v. Department of Health,* 823 So. 2d 823, 825 (Fla. 1st DCA 2002); *Heifetz v. Department of Business Regulation,* 475 So. 2d 1277, 1281 (Fla. 1st DCA 1985).

We agree with DEF and the Intervenors that the standard for determining whether replacement power costs are prudent is "what a reasonable utility manager would have done, in light of the conditions and circumstances that were known, or should [have] been known at the time the decision was made."[11] However, in reaching the conclusion of law that DEF failed to show by a preponderance of the evidence that it acted prudently in Period 1, DEF contends that the ALJ did not follow this standard but instead evaluated DEF's actions in light of present knowledge. However, DEF never specifically identifies the facts it could not have known which

[8] Section 120.57(1)(l), F.S.; *Prysi v. Department of Health,* 823 So. 2d 823, 825 (Fla. 1st DCA 2002)
[9] Section 120.57(1)(l), F.S.
[10] DEF Exceptions at 2.
[11] *Southern Alliance for Clean Energy v. Graham,* 113 So. 3d 742, 750 (Fla. 2013).

were relied upon by the ALJ in reaching his conclusion of imprudence. Without identifying the facts upon which the ALJ improperly relied, it is impossible to evaluate this contention and it is rejected.

The ALJ bases his conclusion that a preponderance of the evidence established the actions of DEF in Period 1 were imprudent on three facts. First, the Mitsubishi aftermarket steam turbine was manufactured with a design point of 420 MW of output. Second, witness Swartz's testimony that the 420 MW was not an operational limitation was unpersuasive. Third, DEF accepted this limitation in Periods 2-5 and worked with Mitsubishi to increase it to 450 MW.

With regard to the first point, DEF does not contest that the steam turbine was aftermarket manufactured with a design point of 420 MW. This conclusion is supported by Findings of Fact Nos. 14-26. With regard to the second point, the ALJ extensively discusses the arguments presented by DEF witness Swartz that the 420 MW is not an operational limitation for this steam turbine in Findings of Fact Nos. 16-32 which culminate in Finding of Fact No. 33. Finding of Fact No. 33, a finding that DEF did not contest, states: "The greater weight of the evidence establishes that the Mitsubishi steam turbine was designed to operate at 420 MW of output and that 420 MW was an operational limitation of the turbine." Since DEF did not take exception to the identical statement in Finding of Fact No. 33, DEF has waived its ability to contest Conclusion of Law 110 on the grounds that the design point did not act as an operational limitation. However, even if DEF had taken exception to Finding of Fact 33, it is clear that the ALJ considered and rejected witness Swartz's arguments that DEF did not act imprudently by operating the steam turbine for extended periods of time at more than 420 MW.

With regard to the third point, DEF does not dispute that in Periods 2-5 it complied with the lower operating limitations placed on it by Mitsubishi and worked with Mitsubishi to increase the steam turbine's output to 450 MW. DEF disputes the significance of having done so. DEF argues that by working with Mitsubishi in Periods 2-5 it was acting to maximize the steam turbine's output for the benefit of its customers. As a general matter, DEF has argued that if a conclusion of law is "infused with overriding policy considerations," the agency, not the ALJ, should decide that issue.[12] Although not specifically identified, apparently, DEF believes that "maximization of output" is such an "overriding policy consideration" which should be given agency deference when determining operational prudence. However, DEF has not identified any statute, rule or Commission order that identifies "maximization of output" as a Commission policy. Additionally, the idea of agency deference, even in the interpretation of an agency's own rules and statutes, is now highly questionable given the passage of Amendment 6 to the Florida Constitution.[13]

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[12] *Pillsbury v. State, Department of Health & Rehabilitative Services,* 744 So. 2d 1040, 1042 (Fla. 2d DCA 1999).

[13] "Section 21. Judicial interpretation of statutes and rules. – In interpreting a state statute or rule, a state court or an officer hearing an administrative action pursuant to general law may not defer to an agency's interpretation of such statute or rule, and must instead interpret such statute or rule de novo."

Additionally, we do not find the *Florida Power* decision cited by DEF on the issue of hindsight to be relevant. In *Florida Power,* the Commission made a finding of fact that was not supported by the record - that "non- safety related" repair work was "safety-related" repair work - and then improperly applied the higher standard of care for "safety-related" repair work. The crux of the problem in *Florida Power* was this unsupported finding of fact. Here DEF is not contesting any of the ALJ's 102 findings of fact as being unsupported by competent substantial evidence. Nor is DEF arguing that the legal conclusions the ALJ has drawn from these uncontested facts are unreasonable. Here there is no mistake of fact triggering the misapplication of a legal standard. In this case all parties agree on the standard to be applied, DEF simply does not like the result reached by the ALJ.

Because DEF has failed to establish that its exception to Conclusion of Law 110 is as or more reasonable that that of the ALJ, DEF's Exception to Conclusion of Law 110 is denied.

DEF Exception to Conclusion of Law 111

DEF takes exception with the ALJ's Conclusion of Law 111, which states:

> 111. DEF's RCA [Root Cause Analysis] concluded that the blade failures were caused by the failure of Mitsubishi to design the 40" blades with adequate design margins. This conclusion is belied by the fact that the L-0 blades have failed at no other facility in the Mitsubishi fleet. Mitsubishi cannot be faulted for failing to design its blades in a way that would allow an operator to run the turbine consistently beyond its capacity.

DEF takes exception to the conclusion that the L-0 blade failures were not caused by inadequate design margins on the L-0 blades and that the turbine was consistently run above its capacity. DEF argues that Mitsubishi was contracted specifically to assess whether this particular steam turbine could handle the proposed 4x1 steam configuration. DEF states that Mitsubishi did not originally identify excess steam flow as a potential problem and it was reasonable for DEF in Period 1 to rely upon Mitsubishi's assessment. The better comparison, according to DEF, is not with other Mitsubishi facilities, but with blade failures in Periods 2-5 when the unit was run at less than 420 MW. Finally, DEF notes that the exact time that the L-0 blades were damaged in Period 1 cannot be established. DEF states that the damage could have occurred during the half of the time in Period 1 when the steam turbine was operated at less than 420 MW.

Intervenors' Response

Intervenors respond that the conclusions of law in Paragraph 111 are supported by competent substantial evidence of record. Further, to the extent that a finding is both a factual and legal conclusion, Intervenors state that it cannot be rejected when there is competent substantial evidence to support the conclusion and the legal conclusion necessarily follows. *Berger,* 653 So. 2d at 480; *Strickland,* 799 So. 2d at 279; *Dunham,* 652 So. 2d at 897. Additionally, Intervenors contend that it is the ALJ, not the Commission, who is authorized to interpret the evidence presented and to decide between two contrary positions supported by

conflicting evidence. *Heifetz v. Dept. of Business Regulation,* 475 So. 2d 1277, 1281-2 (Fla. 1st DCA 1985). With regard to DEF's reliance on the fact that it is impossible to tell when the L-0 blades were damaged in Period 1, Intervenors find this to be irrelevant since the ALJ does not address that fact in Paragraph 111.

Ruling

This conclusion of law constitutes the ALJ's rejection of DEF's Root Cause Analysis (RCA) conclusion that the low pressure steam turbine 40" L-0 blades were poorly designed without adequate strength to withstand operation above a prescribed operating limit without causing damage to the equipment.[14] The ALJ cites the fact that in Mitsubishi's fleet of 32 steam turbines with a combined 57 rows of the same 40" L-0 blades only Bartow Unit 4 has had blade failures caused by excessive blade vibration. Further, Bartow Unit 4 had the highest L-0 blade loading in the entire fleet, in excess of 15,000 lb./hr-ft^2 compared to the 12,000 lb./hr-ft^2 average for the rest of the fleet.[15] Additionally, the ALJ found that as late as June 2017 DEF agreed with Mitsubishi that back-end loading in excess of 15,000 lb./hr-ft^2 was one of "the most significant contributing factors" toward the L-0 blade failure.[16] Given these facts, none of which are disputed by DEF, the ALJ found DEF's exclusion of excessive steam flow from its final RCA to be troubling, as does this Commission.

The ALJ's Conclusion of Law was adequately supported by the relevant findings of fact. DEF has failed to demonstrate that its conclusion is as or more reasonable than that of the ALJ. For this reason, DEF's Exception to Conclusion of Law 111 is denied.

DEF Exception to Conclusion of Law 112

DEF takes exception with the ALJ's Conclusion of Law 112, which states:

> 112. Mitsubishi's more plausible conclusion attributed that blade failure in Period 1 to DEF's operation of the steam turbine in excess of 420 MW, resulting in excessive steam flow to the LP section of the steam turbine, which in turn caused high back-end loading on the L-0 blades.

DEF states that Mitsubishi did not ultimately attribute the blade failure in Period 1 to operation in excess of 420 MW but found in September 22, 2017, that "all blade damage from Period 1 through Period 5 has been identified as dynamic loads from Non-Synchronous Self Excited Vibration (Flutter)." DEF argues that given the fact that the turbine was not operated above 420 MW in Periods 2 through 5, it is more reasonable to conclude that the damage to the blades in Period 1 was the result of unexpected high load stimulus/high energy blending coupled with inadequately designed L-0 blades.

[14] Finding of Fact No. 67.
[15] Finding of Fact No. 83.
[16] Finding of Fact No. 70.

Intervenors' Response

Intervenors contend that DEF does not contest that there are findings of fact supported by competent substantial evidence in the record to support the ALJ's conclusion of law. Thus, Intervenors conclude that, under those circumstances, we cannot reject the ALJ's conclusion of law or substitute its own judgment for that of the ALJ.

Ruling

This conclusion of law constitutes the ALJ's acceptance of Mitsubishi's RCA which concluded that the blade failure in Period 1 was attributable to the operation of the steam turbine in excess of 420 MW which created excessive steam flow in the low pressure section of the steam turbine which in turn caused high back-end loading on the L-0 blades. After telemetry testing on the steam turbine in December 2014, Mitsubishi concluded that the damage to the L-0 blades in all five Periods was attributable to excessive blade vibration, or "flutter."[17] Mitsubishi published its RCA findings in September of 2017. As late as June 2017 DEF agreed with Mitsubishi that back-end loading in excess of 15,000 lb./hr-ft^2 was one of "the most significant contributing factors" toward the L-0 blade failure.[18] Finally, Mitsubishi has stayed with its assessment that the blade damage was created by high load stimulus and high energy blending impacts which did not allow the 40" L-0 blades to produce 450 MW.[19]

DEF is simply rearguing its case that its RCA should be substituted for that of Mitsubishi. DEF has not contested the facts upon which Conclusion of Law 112 is based. Conclusion of Law 112 is the companion to Conclusion of Law 111 and it is upheld for the same reasons – that there is competent substantial evidence to support this conclusion and the conclusion is reasonable given the facts proven by a preponderance of the evidence presented. DEF has failed to demonstrate that its conclusion is as or more reasonable than that of the ALJ. Thus, DEF's Exception to Conclusion of Law 112 is denied.

DEF Exception to Conclusion of Law 113

DEF takes exception with the ALJ's Conclusion of Law 113, which states:

> 113. Mr. Polich persuasively argued that it would have been simple prudence for DEF to ask Mitsubishi about the ability of the turbine to operate continuously in excess of 420 MW output before actually operating it at those levels. DEF understood that the blades had been designed for the Tenaska 3x1 configuration and should have at least explored with Mitsubishi the wisdom of operating the steam turbine with steam flows in excess of those anticipated in the original design.

[17] Finding of Fact Nos. 37, 63.
[18] Finding of Fact No. 70.
[19] Finding of Fact No. 78.

DEF defends not contacting Mitsubishi by citing the following evidence in the record: 1) no limits on steam flow to the low pressure turbine section were originally provided by Mitsubishi; 2) the MW output of a steam turbine is not an "operating parameter"; and 3) Mitsubishi knew DEF would operate the plant in excess of 420 MW. For these reasons, DEF argues that it is "as or more reasonable" to conclude that DEF did not need to contact Mitsubishi.

Intervenors' Response

Intervenors argue that DEF is simply rehashing the evidence presented and urging this Commission to make new findings that are "as or more reasonable" than the findings made by the ALJ. The ALJ states that he found OPC's expert persuasive on this point and it is the exclusive prerogative of the ALJ, not the Commission, to evaluate the credibility of a witness and the weight to be given to his/her testimony. Intervenors contend that since there is competent substantial evidence supporting the conclusion that DEF should have called Mitsubishi, this conclusion cannot be modified.

Ruling

When viewed as a whole, the ALJ has based his analysis of this case by focusing on several areas. First, the nature of the after-market steam turbine and what limitations, if any, were inherent in its original 3x1 design. Second, the type and meaning of guarantees given by Mitsubishi for its current use in a 4x1 configuration. Third, the cause of the damage to the low pressure L-0 40" blades. Analysis of these three areas results in a finding regarding whether DEF acted prudently in the operation of the steam turbine which in turn drives the decision of whether replacement power costs for the April 2017 outage should be recovered or denied.

The ALJ's findings of fact establish that the steam turbine was originally designed to be used in a 3x1 configuration with a design point maximum of 420 MW. The 3x1 configuration used three M501 Type F combustion turbines connected to the steam turbine.[20] The 4x1 design configuration used by DEF used four M501 Type F combustion turbines connected to the same steam turbine.[21] Section 3.2.1 of the original Purchase Agreement[22] clearly states that liquidated damages are available if the steam turbine could not maintain an output of 391.67 MW with a maximum guaranteed output of 420.07 MW.[23] These guaranteed outputs were based on Heat Balance Diagrams [Heat Cases 24 and 48] calculated using only three combustion turbines and heat recovery steam generators with duct firing. Of the 300 different heat balances run by Mitsubishi to predict how the steam turbine would operate, not one showed it producing more than 420 MW.[24]

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[20] Finding of Fact No. 14.
[21] Finding of Fact No. 6.
[22] Entitled the "Guaranteed Performance and Other Guarantees for Acceptance Test" executed between Florida Progress and Mitsubishi.
[23] Finding of Fact No. 26.
[24] Finding of Fact No. 87.

Under these circumstances it is reasonable to believe that Mitsubishi would have instructed its consultant to run heat balances with higher output if it thought the steam turbine could handle it.[25] This is especially true since DEF was proposing the use of an additional 501 Type F combustion turbine and heat recovery steam generator, giving DEF's proposed configuration the ability to produce far more steam than needed to generate 420 MW of output when compared to the original 3x1 application for which the steam turbine was designed.[26] Additionally, neither DEF nor Mitsubishi had any experience running a 4x1 combined cycle plant prior to commencing operation of Bartow Unit 4.[27] In sum, for these reasons the ALJ found that Mitsubishi did not contemplate DEF's operation of the steam turbine beyond the heat balance scenarios set out in the Purchase Agreement.[28]

Given these extremely unique circumstances, the ALJ concluded that DEF's failure to contact Mitsubishi before pushing output beyond 420 MW was not prudent. Contacting Mitsubishi would have allowed DEF to receive written verification from Mitsubishi that the steam turbine could be safely operated above 420 MW and would have effectively updated the warranty to reflect the higher MW output.[29] The ALJ's conclusion of law is supported by competent substantial evidence of record. Because DEF has failed to demonstrate that its conclusion of law is as or more reasonable than the ALJ's, DEF's Exception to Conclusion of Law 113 is denied.

DEF Exception to Conclusion of Law 114

DEF takes exception with the ALJ's Conclusion of Law 114, which states:

> 114. The record evidence demonstrated an engineering consensus that vibrations associated with high energy loadings were the primary cause of the L-0 blade failures. DEF failed to satisfy its burden of showing its actions in operating the steam turbine in Period 1 did not cause or contribute significantly to the vibrations that repeatedly damaged the L-0 blades. To the contrary, the preponderance of the evidence pointed to DEF's operation of the steam turbine in Period 1 as the most plausible culprit.

DEF argues that it is "as or more reasonable" to conclude from the evidence presented that DEF's actions did not cause or contribute significantly to the vibrations that damaged the L-0 blades. DEF contends this is true because the L-0 blades were damaged in Periods 2-5 when the unit was not run above 420 MW as well as Period 1 when it was. DEF further states that the ALJ is imposing the impossible standard of proving a negative. DEF argues that it does not have the burden to prove that damage did not occur as a result of its actions. Rather, DEF states that it is only required to show that it acted as a reasonable utility manager would have done given the facts known or reasonably knowable at the time without the benefit of hindsight review.

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[25] Finding of Fact No. 87.
[26] Finding of Fact No. 31.
[27] Finding of Fact No. 85.
[28] Finding of Fact No. 102.
[29] Factual Finding No. 93.

Intervenors' Response

Intervenors argue that Conclusion of Law 114 summaries the findings of fact that support the ALJ's ultimate determination. Intervenors state that these findings of fact are supported by competent substantial evidence and we may not reject them. With regard to the contention that the ALJ required DEF to prove a negative, Intervenors argue that DEF has the burden of proof to demonstrate that it acted prudently in the operation of Bartow Unit 4 which requires it to establish a *prima facie* case that it did act prudently and to rebut evidence of its imprudence. The Intervenors assert that DEF did neither here and the ALJ's conclusion may not be disturbed.

Ruling

As discussed in the ruling on Conclusions of Law 110-113 above, the ALJ found that a preponderance of the evidence supported the finding that the L-0 blade damage was caused by vibrations/flutter associated with high energy loadings. Further, the ALJ found that the weight of the evidence supported the conclusion that the high energy loading on the blades was the result of excessive steam flow through the low pressure section of the steam turbine caused by operating the steam turbine above 420 MW. DEF does not contest that these findings of fact are supported by competent substantial evidence of record.

We agree with the ALJ that DEF has the burden of proving that it acted prudently in the operation of its steam turbine, i.e., the burden to make a *prima facie* case supported by competent substantial evidence that it acted prudently. The burden of proof also requires DEF to rebut evidence produced that it acted imprudently. Here under the unique circumstances of this case, DEF has failed to prove it acted prudently in light of the information that was available to it at the time as found by the ALJ in Conclusion of Law 110. DEF's exception to Conclusion of Law 114 reargues DEF's factual position and fails to demonstrate that its conclusion is as or more reasonable than the ALJ's. For these reasons, DEF's Exception to Conclusion of Law 114 is denied.

DEF Exception to Conclusion of Law 119

DEF takes exception with the ALJ's Conclusion of Law 119, which states:

> 119. It is speculative to state that the original Period L-0 blades would still be operating today had DEF observed the design limit of 420 MW. It is not speculative to state that the events of Periods 2 through 5 were precipitated by DEF's actions during Period 1. It is not possible to state what would have happened from 2012 to 2017 if the excessive loading had not occurred, but it is possible to state that events would not have been the same.

Specifically, DEF disputes the ALJ's conclusion that it is not speculative to state that the events of Periods 2 through 5 were precipitated by DEF's actions during Period 1. DEF argues that there is no causal link between the operation of the unit in Period 1 and the forced outage

that occurred in Period 5. DEF contends that the lack of a causal link is proven by the fact that there was no residual damage done to the steam turbine itself in Period 1 and all parties agreed that DEF's operation of the plant subsequent to Period 1 was prudent.

Intervenors' Response

Intervenors state that the conclusions in Paragraph 119 are based on the ALJ's findings of fact in Paragraphs 84 and 89 which are supported by competent substantial evidence and OPC's expert's credible testimony. Intervenors argue that to the extent that this conclusion is an inference from the ALJ's factual findings, the ALJ is permitted to draw reasonable inferences from competent substantial evidence in the record. *Amador v. School Board of Monroe County*, 225 So. 3d 853, 858 (Fla. 3d DCA 2017). Further, Intervenors state that the fact that more than one reasonable inference can be drawn from the same evidence of record is not grounds for setting aside the ALJ's conclusion. *Id.*

Ruling

This conclusion of law is in response to OPC witness Polich's testimony that the low pressure L-0 blades would still have been in use but for the operation of the steam turbine in excess of 420 MW.[30] While the ALJ rejected that conclusion as too speculative, he did accept witness Polich's testimony that the damage to the blades was most likely cumulative during Period 1, making it irrelevant exactly when during the operation of the unit in Period 1 the damage occurred.[31] DEF's witness Swartz testified that the damage to the blades could have occurred in Period 1 during the 50% of the time that the steam turbine was operated under 420 MW, i.e., when by Intervenors' standards, the unit was being operated prudently. Where reasonable people can differ about the facts, an agency is bound by the hearing officer's reasonable inferences based on the conflicting inferences arising from the evidence. *Amador v. School Board of Monroe County,* 225 So. 3d 853, 857-8 (Fla. 3d DCA 2017). Additionally, the hearing officer is entitled to rely on the testimony of a single witness even if the testimony contradicts the testimony of a number of other witnesses. *Stinson v. Winn*, 938 So. 2d 554, 555 (Fla. 1st DCA 2006).

DEF's exception to Conclusion of Law 119 reargues DEF's factual position and fails to demonstrate that its conclusion is as or more reasonable than the ALJ's. For these reasons, DEF's Exception to Conclusion of Law 119 is denied.

DEF Exception to Conclusion of Law 120

DEF takes exception with the ALJ's Conclusion of Law 120, which states:

> 120. In his closing argument, counsel for White Springs summarized the equities of the situation very well:

[30] Finding of Fact No. 84.
[31] Finding of Fact No. 89; Footnote 4.

> You can drive a four-cylinder Ford Fiesta like a V8 Ferrari, but it's not quite the same thing. At 4,000 RPMs, in second gear, the Ferrari is already doing 60 and it's just warming up. The Ford Fiesta, however, will be moaning and begging you to slow down and shift gears. And that's kind of what we're talking about here.
>
> It's conceded as fact that the root cause of the Bartow low pressure turbine problems is excessive vibrations caused repeatedly over time. The answer to the question is was this due to the way [DEF] ran the plant or is it due to a design flaw? Well, the answer is both.
>
> The fact is that [DEF] bought a steam turbine that was already built for a different configuration that was in storage, and then hooked it up to a configuration . . . that it knew could produce much more steam than it needed. It had a generator that could produce more megawatts, so the limiting factor was the steam turbine.
>
> On its own initiative, it decided to push more steam through the steam turbine to get more megawatts until it broke.
>
> * * *
>
> So from our perspective, [DEF] clearly was at fault for pushing excessive steam flow into the turbine in the first place. The repair which has been established . . . may or may not work, but the early operation clearly impeded [DEF's] ability to simply claim that Mitsubishi was entirely at fault. And under those circumstances, it's not appropriate to assign the cost to the consumers.

DEF argues that Conclusion of Law 120 is a slightly edited, verbatim recitation of PCS Phosphate counsel's final argument which the ALJ adopts, characterizing it as summarizing "the equities of the situation very well." DEF takes exception to that portion of the final argument stating that under the circumstances presented in this case, it is not appropriate to assign the cost of the February 2017 forced outage to DEF's customers. DEF argues that it is as or more reasonable to conclude that here, where DEF consistently acted prudently, DEF should not be forced to bear replacement power costs.

Intervenors' Response

As demonstrated in its response to Paragraphs 110-114 above, Intervenors argue that there is more than adequate competent substantial evidence to support the ALJ's ultimate determination that DEF did not act prudently and should bear replacement power costs. Intervenors state that DEF is simply rearguing the case it presented to the ALJ which the ALJ found to be unpersuasive.

Ruling

As noted above, this conclusion of law is an edited version of PCS Phosphate counsel's final argument which the ALJ agrees has summarized the "equities of the situation very well." The ALJ agrees that excessive vibrations over time caused the steam turbine problems. Further, whether the vibration was due to the way the plant was run or due to a design flaw is that both are true. The ALJ concludes that DEF was at fault for pushing excessive steam flow into the turbine. The ALJ further agrees that by operating the unit above 420 MW, without contacting Mitsubishi, DEF impeded its ability to claim that Mitsubishi was entirely at fault. Under these circumstances, PCS Phosphate's counsel, and the ALJ, conclude that consumers should not bear replacement power costs.

Upon review of this material, it is clear that it is a summary of Conclusions of Law 110-114 above. These conclusions are supported by competent substantial evidence of record. Again, DEF reargues the factual underpinnings of the ALJ's Conclusion of Law without adequately demonstrating that DEF's conclusion is as or more reasonable. Therefore, DEF's Exception to Conclusion of Law 120 is denied.

DEF Exception to Conclusion of Law 121

DEF takes exception with the ALJ's Conclusion of Law 121, which states:

> 121. The greater weight of the evidence supports the conclusion that DEF did not exercise reasonable care in operating the steam turbine in a configuration for which it was not designed and under circumstances which DEF knew, or should have known, that it should have proceeded with caution, seeking the cooperation of Mitsubishi to devise a means to operate the steam turbine above 420 MW.

Specifically, DEF takes exception with the ALJ's conclusion that it did not exercise reasonable care in operating the steam turbine and should have sought the cooperation of Mitsubishi prior to operating the steam turbine above 420 MW. DEF again argues that it is as or more reasonable to conclude that operation within the express parameters given by Mitsubishi was prudent and did not require further consultation with the manufacturer.

Intervenors' Response

As demonstrated in their response to Paragraphs 110-114 above, Intervenors argue that there is more than adequate competent substantial evidence to support the ALJ's ultimate determination that DEF did not exercise reasonable care operating the plant in excess of 420 MW without consulting Mitsubishi first. Intervenors assert that the Commission is not free to reject or modify conclusions of law that are supported by competent substantial evidence and logically flow from that evidence.

Ruling

This conclusion is a statement of the ALJ's ultimate conclusion that DEF did not exercise reasonable care in the operation of the steam turbine given its configuration and design without consulting Mitsubishi. This ultimate conclusion is supported by competent substantial evidence as discussed in Conclusions of Law 110-114 above. Because DEF has failed to demonstrate that its conclusion is as or more reasonable than the ALJ's, DEF's Exception to Conclusion of Law 121 is denied.

DEF Exception to Conclusion of Law 122

DEF takes exception with the ALJ's Conclusion of Law 122, which states:

> 122. Given DEF's failure to meet its burden, a refund of replacement power costs is warranted. At least $11.1 million in replacement power was required during the Period 5 outage. This amount should be refunded to DEF's customers.

DEF takes exception to the ALJ's conclusion that DEF should refund replacement power costs to its customers. Citing the arguments made in its exceptions to Paragraphs 110-114 and 119, DEF states that DEF did act prudently in the operation of its Bartow Unit 4 plant and, therefore, it is as or more reasonable to conclude that no replacement power costs should be refunded to customers.

Intervenors' Response

Intervenors argue that the ALJ's conclusion is supported by competent substantial evidence of record and is consistent with applicable law. Therefore, the Intervenors conclude that the Commission cannot, under these circumstances, reject the ALJ's conclusion of law by reweighing the evidence and substituting new and directly contrary findings that are favorable to DEF.

Ruling

This conclusion of law is based on the ALJ's Conclusions of Law 110-114, supported by competent substantial evidence of record, that DEF acted imprudently in its operation of the steam turbine in Period 1. Since DEF disagrees that it acted imprudently in incurring the replacement power costs, it argues that the $11.1 million should not be refunded to customers. The amount of the refund is not contested. The findings of fact underlying Conclusion of Law 122 are not in dispute. Ultimately, the conclusion is supported by competent substantial evidence. Because DEF has failed to demonstrate that DEF's conclusion was as or more reasonable that the ALJ's, DEF's Exception to Conclusion of Law 122 is denied.

DEF Exception to Conclusion of Law 123

DEF takes exception with the ALJ's Conclusion of Law 123, which states:

123. DEF failed to carry its burden to show that the Period 5 blade damage and the required replacement power costs were not consequences of DEF's imprudent operation of the steam turbine in Period 1.

For the reasons stated in its exception to Paragraph 110, DEF argues that it did demonstrate by a preponderance of the evidence that it operated the steam turbine prudently in Period 1. Thus, DEF contends that it is as or more reasonable to conclude that DEF carried its burden of proof that the steam turbine was operated prudently in Period 1.

Intervenors' Response

Intervenors contend that the ALJ's conclusion is supported by competent substantial evidence of record as detailed in Intervenors' responses to DEF's exceptions to Paragraphs 110-114 and 119, and is consistent with applicable law. Therefore, Intervenors argue that we cannot, under these circumstances, reject the ALJ's conclusion of law by reweighing the evidence and substituting new and directly contrary findings that are favorable to DEF.

Ruling

A review of DEF's exception reveals that it is simply re-argument of its position taken in Conclusion of Law No. 110 discussed above. For the reasons stated therein, DEF's Exception to Conclusion of Law 123 is denied because DEF has failed to demonstrate that its conclusion is as or more reasonable that the ALJ's.

DEF Exception to Conclusion of Law 124

DEF takes exception with the ALJ's Conclusion of Law 124, which states:

124. The de-rating of the steam turbine that required the purchase of replacement power for the 40 MW loss caused by the installation of the pressure plate was a consequence of DEF's failure to prudently operate the steam turbine during Period 1. Because it was ultimately responsible for the de-rating, DEF should refund replacement costs incurred from the point the steam turbine came back on line in May 2017 until the start of the planned fall 2019 outage that allowed the replacement of the pressure plate with the redesigned Type 5 40" L-0 blades in December 2019. Based on the record evidence, the amount to be refunded due to the de-rating is $5,016,782.

DEF argues that the operation of the steam turbine in Period 1 was proven by DEF by a preponderance of the evidence to be prudent. DEF contends that this fact, coupled with the undisputed evidence that DEF also operated the steam turbine prudently in Periods 2-5, demonstrates that it is as or more reasonable to conclude that the Period 5 blade damage and resulting replacement power costs were not a consequence of DEF's operation of the steam turbine during Period 1.

Intervenors' Response

Intervenors argue that the ALJ's conclusion is supported by competent substantial evidence of record as detailed in Intervenors' responses to DEF's exceptions to Conclusions of Law 110-114 and 119. Intervenors contend that DEF's is simply rearguing its case that its operation of the steam turbine was prudent, and therefore no refunds associated with the installation of the pressure plate are required. Intervenors assert that the basis for the ALJ's conclusion that derating costs of $5,016,782 should be refunded to customers is his finding of DEF's imprudence in operation of the steam turbine in Period 1. For these reasons, Intervenors conclude that there is no basis to set aside that finding or to set aside this conclusion of law.

Ruling

There is no question that installation of the pressure plate caused the derating of the steam turbine from 420 to 380 MW.[32] Likewise, the parties have agreed that the period of time associated with the derating is April 2017 through the end of September 2019.[33] Nor do the parties disagree that the amount associated with the derating is $5,016,782.[34] DEF is simply rearguing its position that its operation of the steam turbine was not responsible for blade damage in Period 5, a position considered and rejected by the ALJ.[35] As discussed in Conclusions of Law 110-114 and 119 above, there is competent substantial evidence to support the ALJ's conclusion that DEF's imprudent actions in Period 1 resulted in the derating. That being the case, DEF's Exception to Conclusion of Law 124 is denied because DEF has failed to demonstrate that its conclusion is as or more reasonable than that of the ALJ.

DEF Exception to Conclusion of Law 125

DEF takes exception with the ALJ's Conclusion of Law 125, which states:

> 125. The total amount to be refunded to customers as a result of the imprudence of DEF's operation of the steam turbine in Period 1 is $16,116,782, without interest.

DEF takes exception to this conclusion on the grounds that DEF did prove by a preponderance of the evidence that it acted prudently in the operation of the steam turbine in Period 1. That being the case, DEF contends that it is as or more reasonable to conclude that no refund to its customers of any amount is required.

Intervenors' Response

Intervenor's argue that the ALJ's conclusion is supported by competent substantial evidence of record as detailed in Intervenors' responses to DEF's exceptions to Conclusions of

[32] Finding of Fact No. 60.
[33] Finding of Fact No. 61.
[34] Finding of Fact No. 80.
[35] Finding of Fact No. 119.

Law 110-114 and 119. Intervenors state that DEF is simply rearguing its case that its operation of the steam turbine was prudent and therefore no refunds are required. Intervenors assert that we cannot, under these circumstances, reject the ALJ's conclusion of law by reweighing the evidence and substituting new and directly contrary findings that are favorable to DEF.

Ruling

This is a fall-out conclusion based upon Conclusions of Law 110-114 and 119 discussed above, which results in the ultimate conclusion of law that DEF acted imprudently. Conclusions of Law 110-114 and 119 are based on competent substantial evidence of record. For that reason, DEF's Exception to Conclusion of Law 125 is denied, because DEF has failed to demonstrate that its conclusion is as or more reasonable than that of the ALJ.

C. Conclusion

DEF has failed to show that the ALJ's conclusions are not reasonable or that the facts from which his conclusions are drawn are not based on competent substantial evidence of record. Further, DEF has not argued that the proceeding did not comport with the essential requirements of law. Finally, DEF has not specifically stated how the ALJ's conclusions of law are contrary to prior Commission policy statements for utility operation. For these reasons, we deny DEF's exceptions to Conclusions of Law 110-114 and 119-125 since DEF has failed to demonstrate that its proposed modifications to those conclusions are as or more reasonable than that of the ALJ.

III. ADOPTION AND APPROVAL OF THE RECOMMENDED ORDER AS THE FINAL ORDER

As set forth above, we deny all exceptions filed by DEF, approve all of the ALJ's findings of fact and conclusions of law without modification, and hereby adopt the ALJ's Recommended Order, found in Attachment A, as our Final Order.

We note that this case is highly fact specific and for that reason will have limited precedential value. There is literally no other plant in DEF's system that has four combustion turbines connected to one steam turbine nor any other plant in DEF's system that uses an after-market steam turbine designed for a 3x1 configuration in a 4x1 configuration. The ALJ was persuaded by OPC witness Polich's testimony that because Bartow Unit 4 was operated to produce more than 420 MW, too much steam was forced into the low pressure section of the steam turbine damaging the L-O blades. Nothing in the ALJ's Recommended Order or our decision in any way establishes, indicates, implies or imputes any going-forward protocol for the operation of steam turbines in DEF's fleet. Adoption of the Recommended Order with this conclusion of law does not translate into a general policy decision by the Commission that under any set of circumstances it is imprudent to run a unit above its nameplate capacity.

Based on the foregoing, it is

ORDERED by the Florida Public Service Commission that the attached Recommended Order (Attachment A) is adopted and approved as the Final Order in this docket. It is further

ORDERED that all of the exceptions to the Recommended Order filed by Duke Energy Florida, LLC, are denied. It is further

ORDERED that the docket shall remain open.

By ORDER of the Florida Public Service Commission this 29th day of October, 2020.

ADAM J. TEITZMAN
Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399
(850) 413-6770
www.floridapsc.com

Copies furnished: A copy of this document is provided to the parties of record at the time of issuance and, if applicable, interested persons.

SPS

Commissioner Donald J. Polmann dissents with opinion.

I respectfully disagree with the majority decision. Having reviewed the evidentiary record in its entirety, applying my knowledge and expertise to the issues, I find that DEF acted prudently. I believe that the majority applied legal boundaries and restrictions that impeded it from taking certain actions, thereby precluding this Commission from exercising its broad authority and its affirmative duty to judge prudence in the public interest of the State of Florida. In my opinion, the particularities of this case involving substantial confidential testimony, the Sunshine Law, and transfer to DOAH imposed such overbearing limitations on the majority that its role was effectively reduced to ministerial.

To ensure that this Commission has clear and unambiguous authority to execute its full breadth of duties in future dockets, I strongly support statutory revisions to redress the diminished capacities that burdened this case. In my opinion, this Commission must advocate to the Florida Legislature for necessary statutory authority to hear confidential material efficiently and effectively in the future.

My profound concern is for perceptions of legal boundaries and restrictions that led this Commission in the majority to be muted into near dysfunction on addressing the Administrative Law Judge's (ALJ's) Recommended Order. My perception of legal boundaries and restrictions is of lesser limitations that do not impede this Commission from taking certain actions which better serve the public interest. Section 120.57(1)(1), Florida Statutes, affords a process in which to accept, reject, or modify an ALJ's Recommended Order. In this case, I disagree that the Conclusions of Law were so inextricably linked with the Findings of Fact. This inextricable linkage ostensibly conflicts with our obligation to review the entire record and leads us down the path of what I believe is strict inappropriate deference to the ALJ's determination of prudence. If that strict deference is appropriate, our role is reduced to ministerial where we must accept the ALJ Order and are unable to fully consider and determine prudence based upon the entire record. The standard for approving an "exception to a Conclusion of Law" is that a different Conclusion of Law is "as or more reasonable" than that of the ALJ and including particular reasons as to why an exception is made. I believe that the information DEF has provided in its exceptions is sufficient reason in Toto to accept a position that is as reasonable as the ALJ. Therefore, I submit that the Commission should have modified the ALJ's Order, by accepting DEF's exceptions to Conclusions of Law 110 through 114 and 119 through 125 and concluded that DEF met its burden of proof that its actions were prudent.

However, my vote in this matter also rejects the notion that the circumstances of this case, combined with legal constraints, eliminated the Commission's ability to hear this case in the first instance. We must conduct all proceedings in the Sunshine pursuant to s. 286.011, F.S., which effectively precludes this Commission from hearing cases requiring presentation of substantial confidential testimony and exhibits. Contrary to normal application of the Administrative Procedure Act and our practice, this case was sent to the Division of Administrative Hearings with delegation of our fact-finding responsibilities to an ALJ. Section 120.569, F.S., provides that each agency "may" refer a matter to DOAH and sets forth the legal standards for the ALJ as fact-finder "if" the agency makes the referral. The conflict of Sunshine and confidentiality caused the Commission to abdicate its fact-finder role.

In my opinion, the Commission's inability to hear this case affected the outcome. Our unique agency expertise and understanding of sound utility principles and practices to assess witness testimony and the record in this case would have been the more appropriate procedure in the public interest. While I fully respect and support the Sunshine Law and conducting our business in the Sunshine, I believe unintended consequences arose in this case through a process defect where certain statutes are not acting in harmony. A case based almost entirely on confidential information, though rare, points directly to critical Commission functions worthy of remedy. Therefore, to avoid frustrating the public interest in the future, I would strongly encourage the Legislature to consider amending the Sunshine Law to allow for a limited and narrow exception which would allow the Commission to conduct a closed hearing in the rare instance where most of the disputed facts at issue are confidential under s. 366.093, F.S.

NOTICE OF FURTHER PROCEEDINGS OR JUDICIAL REVIEW

The Florida Public Service Commission is required by Section 120.569(1), Florida Statutes, to notify parties of any administrative hearing or judicial review of Commission orders that is available under Sections 120.57 or 120.68, Florida Statutes, as well as the procedures and time limits that apply. This notice should not be construed to mean all requests for an administrative hearing or judicial review will be granted or result in the relief sought.

Any party adversely affected by the Commission's final action in this matter may request: 1) reconsideration of the decision by filing a motion for reconsideration with the Office of Commission Clerk, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, within fifteen (15) days of the issuance of this order in the form prescribed by Rule 25-22.060, Florida Administrative Code; or 2) judicial review by the Florida Supreme Court in the case of an electric, gas or telephone utility or the First District Court of Appeal in the case of a water and/or wastewater utility by filing a notice of appeal with the Office of Commission Clerk, and filing a copy of the notice of appeal and the filing fee with the appropriate court. This filing must be completed within thirty (30) days after the issuance of this order, pursuant to Rule 9.110, Florida Rules of Appellate Procedure. The notice of appeal must be in the form specified in Rule 9.900(a), Florida Rules of Appellate Procedure.

ATTACHMENT A

STATE OF FLORIDA
DIVISION OF ADMINISTRATIVE HEARINGS

IN RE: FUEL AND PURCHASED POWER COST RECOVERY CLAUSE WITH GENERATING PERFORMANCE INCENTIVE FACTOR,

Case No. 19-6022

/

RECOMMENDED ORDER

Pursuant to notice, a final hearing was conducted in this case on February 4 and 5, 2020, in Tallahassee, Florida, before Lawrence P. Stevenson, a duly-designated Administrative Law Judge ("ALJ") of the Division of Administrative Hearings ("DOAH").

APPEARANCES

For Duke Energy Florida, LLC ("DEF" [1]):

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[1] References to DEF include Progress Energy, DEF's predecessor in interest in the Bartow power plant that is the subject of this proceeding. DEF purchased Progress Energy in 2011.

For the Public Service Commission (the "Commission"):

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For White Springs Agricultural Chemicals, Inc., d/b/a PCS Phosphate—White Springs ("White Springs"):

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STATEMENT OF THE ISSUES

Two issues have been referred by the Commission to DOAH for a disputed-fact hearing:

ISSUE 1B: Was DEF prudent in its actions and decisions leading up to and in restoring the unit to service after the February 2017 forced outage at

the Bartow plant and, if not, what action should the Commission take with respect to replacement power costs?

ISSUE 1C: Has DEF made prudent adjustments, if any are needed, to account for replacement power costs associated with any impacts related to the de-rating of the Bartow plant? If adjustments are needed and have not been made, what adjustment(s) should be made?

PRELIMINARY STATEMENT

On January 2, 2019, the Commission opened Docket No. 20190001-EI, *In re: Fuel and purchased power cost recovery clause with generating performance incentive factor*, commonly referred to as the "Fuel Clause" docket. The Fuel Clause docket is a recurring, annual docket to which all investor-owned electric utilities serving customers in Florida are parties. Through the Fuel Clause docket, utilities are permitted to recover reasonably and prudently incurred costs of the fuel and fuel-related activities needed to generate electricity. Among the issues raised in the 2019 Fuel Clause docket was DEF's request to recover the replacement power costs incurred in connection with an unplanned outage to the steam turbine at DEF's Bartow Unit 4 combined cycle power plant (the "Bartow Plant") in February 2017. Issues 1B and 1C were raised as part of the 2019 Fuel Clause docket.

On November 5, 2019, the Commission held a final hearing in the 2019 Fuel Clause docket. All issues related to DEF's request to recover its fuel and purchased power costs were addressed, except for Issues 1B and 1C. Both Issues 1B and 1C involved extensive claims of confidentiality with respect to the pre-filed testimony of DEF witness Jeffrey Swartz, OPC witness Richard Polich, and the proposed trial exhibits.

The Commission found that it was impracticable to conduct direct or cross-examination in an open hearing without extensive reference to

confidential material. Despite its apparent authority under section 366.093, Florida Statutes, to declare documents confidential, the Commission took the position that it lacked authority to close a public hearing to protect materials and topics it had previously determined to be confidential. The Commission therefore referred Issues 1B and 1C to DOAH for a closed evidentiary hearing and issuance of a Recommended Order.

On November 26, 2019, a telephonic status conference was held to set hearing dates, establish the procedures for handling confidential material, the need for discovery, the use of written testimony, and the use of the Comprehensive Exhibit List ("CEL") admitted into evidence at the Commission's November 5, 2019, hearing. At the status conference, the parties agreed to the hearing dates of February 4 and 5, 2020. The undersigned requested the parties to confer and file a motion setting forth proposed procedures for the handling of confidential material before, during, and after the hearing. The parties filed a Joint Motion on Confidentiality on December 6, 2019, which was adopted by Order issued December 9, 2019.

On December 23, 2019, the Commission's record was transmitted to DOAH on two CD-ROM discs. Disc One contained non-confidential information and Disc Two contained information held as confidential.

The final hearing was convened and completed as scheduled on February 4 and 5, 2020. At the outset of the hearing, the parties submitted an updated CEL from the November 2019 proceeding before the Commission. The revised CEL listed 114 exhibits. The revised CEL was numbered as Exhibit 114 and admitted by stipulation.

DEF presented the direct and rebuttal testimony of Jeffrey R. Swartz, its Vice President of Generation. DEF moved for the admission of Exhibits 80 through 82, which were admitted into the record.

OPC presented the testimony of Richard Polich, an engineer with expertise in the design of power generation systems, including steam turbines. OPC moved for the admission of Exhibits 68 through 75 and 101 through 109, which were admitted into the record. At the hearing, OPC Exhibits 115 through 117 were marked, moved, and admitted into the record.

The Commission moved for the admission of Exhibits 110 and 111, which were admitted into the record.

FIPUG moved for the admission of Exhibit 118, which was admitted into the record.

White Springs moved for the admission of Exhibits 112 and 113, which were admitted into the record.

The three-volume Transcript of the final hearing was filed with DOAH on February 24, 2020. Pursuant to an agreement approved by the undersigned, the parties timely filed their Proposed Recommended Orders on March 20, 2020. DEF and the Commission filed separate Proposed Recommended Orders. OPC, FIPUG, and White Springs submitted a joint Proposed Recommended Order (unless otherwise specified, references to OPC as to positions stated in its Proposed Recommended Order should be understood to include FIPUG and White Springs). All three Proposed Recommended Orders have been duly considered in the writing of this Recommended Order.

Unless otherwise indicated, statutory references are to the 2019 edition of the Florida Statutes.

FINDINGS OF FACT

Based on the evidence adduced at hearing, and the record as a whole, the following Findings of Fact are made:

THE PARTIES

1. The Commission is the state agency authorized to implement and enforce Chapter 366, Florida Statutes, which governs the regulation of every "public utility" as defined in section 366.02(1).

2. DEF is a public utility and is therefore subject to the Commission's jurisdiction. DEF is a subsidiary of Duke Energy, one of the largest energy holding companies in the United States.

3. OPC is statutorily authorized to represent the citizens of the state of Florida in matters before the Commission, and to appear before other state agencies in connection with matters under the Commission's jurisdiction. § 350.0611(1), (3), and (5), Fla. Stat.

4. FIPUG is an association comprising large commercial and industrial power users within Florida. A substantial number of FIPUG's members are customers of DEF.

5. White Springs operates energy intensive phosphate mining and processing facilities in Hamilton County and is one of DEF's largest industrial customers.

THE BARTOW PLANT

6. The Bartow Plant is a 4x1 combined cycle power plant composed of combustion turbine generators whose waste heat is used to produce steam that powers a steam turbine manufactured by Mitsubishi Hitachi Power Systems ("Mitsubishi"). "4x1" references the fact that there are four Siemens

160 megawatt ("MW") Type 501 F combustion turbines, each connected to one of four heat recovery steam generators ("HRSG"), all of which in turn are connected to one steam turbine.

7. A combined cycle power plant uses gas and steam turbines together to produce electricity. Combustion of natural gas in the combustion turbine turns a generator that produces electricity. The waste heat from the combustion turbine is routed to an HRSG. The HRSG produces steam that is then routed to the steam turbine which, in turn, generates extra power.

8. Combined cycle plants can be set up in multiple configurations, providing considerable operational flexibility and efficiency. It is not necessary for all four HRSGs to provide steam to the steam turbine at the same time. The Bartow Plant can operate on all possible configurations of 4x1, i.e., 1x1, 2x1, 3x1, or 4x1. It also has the ability to augment heat through the use of duct burners. The combustion turbines can operate in "simple cycle" mode to generate electricity when the steam turbine is off-line.

9. The steam turbine is made up of a high pressure ("HP")/intermediate pressure ("IP") section and a low-pressure ("LP") section. Each of these turbine sections has a series of blades. As the steam passes through the blades, the steam exerts its force to turn the blades which, in their turn, cause a rotor to spin. The rotor is connected to a generator, and the generator produces electricity.

10. Steam leaving the HRSGs is introduced to the steam turbine at a high-pressure inlet into the HP turbine. The steam is returned to the HRSG for reheating, then enters the IP turbine. Finally, steam exiting the IP turbine is directed into the LP turbine.

11. The LP section of the steam turbine is dual-flow. The steam is admitted in the middle and flows axially in opposite directions through two opposing mirror-image turbine sections, each of which contains four sets of blades. After passing through the LP section, the steam exhausts into a condenser.

12. The sets of blades increase in size from the front to the back of the LP section. The blades get longer as the steam flows through the turbine. The steam loses energy as it passes through the machine and thus more surface area of blade is needed for the weaker steam to produce the force needed to spin the rotor. The final stage of blades in the LP section consists of 40" L-0 blades, the longest blades in the steam turbine.

13. [redacted]

14. The Mitsubishi steam turbine was originally designed for Tenaska Power Equipment, LLC ("Tenaska"), to be used in a 3x1 combined cycle configuration with three M501 Type F combustion turbines connected to the steam turbine with a gross output of 420 MW of electricity. For reasons unexplored at the hearing, Tenaska never took delivery of the turbine. It was stored in a Mitsubishi warehouse under controlled conditions that kept it in like-new condition.

15. During the design and planning process for the Bartow Plant, DEF's employees responsible for obtaining company approval to build the plant, reported to senior executives that they had found this already-built steam turbine. The Business Analysis Package of DEF's project authorization documents stated that the Mitsubishi steam turbine "proved to be a very good fit for the 4 CT and 4 HRSG combinations."

16. Prior to purchasing the steam turbine, DEF contracted with Mitsubishi to evaluate the design conditions to ensure the steam turbine was compatible with the Bartow Plant's proposed 4x1 combined cycle configuration. [redacted]

[redacted]

17. A "heat balance" is an engineering calculation that predicts the performance and output of power plant equipment based on different variables of ambient conditions and operating parameters. Any change in a variable causes a distinct "heat balance" and calculation of the expected plant output and performance.

18. One such variable was "power factor," a measure of the efficiency of how current is converted to useful power. A power factor of 1.0 indicates "unity," i.e., the most efficient possible conversion of load current. [redacted]

19. Jeffrey R. Swartz, DEF's Vice President of Generation, testified that DEF in fact operates the Bartow Plant at a power factor number that falls between .97 and .995.

20. [redacted]

[redacted]

24. Mr. Swartz further asserted that, prior to completion of the Purchase Agreement, Mitsubishi understood that DEF intended to operate the steam turbine in a 4x1 configuration with a power factor exceeding [redacted] which would result in the generation of more than 420 MW of electrical output.

25. Section 3.2 of the Purchase Agreement, titled [redacted] states, in relevant part:

[redacted]

26. The plain language of section 3.2.1 establishes [redacted]

[2] MPS stands for Mitsubishi Power Systems, Inc.

[redacted] It is unclear how Mr. Swartz translated this language into a [redacted]

27. In any event, the parties disagree as to the significance of the 420 MW maximum output designation. DEF and the Commission contend that the designated megawatt capacity of a steam turbine is not a control mechanism or a limit that the operator must stay below, but is the byproduct of operating the unit within the design parameters provided by the manufacturer at various combinations of such factors as steam flows, steam temperatures, steam pressures, exhaust pressures, ambient temperatures, and humidity.

28. DEF and the Commission contend that the numbers stated in the [redacted] are calculated estimates of the conditions that will achieve [redacted] output. If DEF was able in practice to operate the steam turbine within the design parameters and achieve output in excess of [redacted] then it was simply delivering maximum value to its ratepayers.

29. OPC asserts 420 MW is an operational limitation. [redacted] OPC points out that Mitsubishi conducted extensive [redacted] (from December 2014 until April 2016) that resulted in a document titled, [redacted]" dated March 18, 2015 (the "Report"). The Report expressly stated that the [redacted] The Report also stated that the [redacted] These statements were supported by section 3.2.1.2 of the Purchase Agreement, which states that [redacted] of the steam turbine.

30. OPC points out that section 4.1 of the Purchase Agreement, titled [redacted] expressly states: [redacted]

[redacted]

31. OPC notes that [redacted] reached [redacted] of output using only [redacted] OPC further notes that the Bartow Plant had a [redacted] meaning that it had the ability to produce [redacted] of output when compared to the [redacted] for which the steam turbine was originally designed.

32. The Mitsubishi steam turbine converts steam energy into rotational force (horsepower) that in turn drives an electric generator. The generator purchased by DEF for the Bartow Plant that was attached to the Mitsubishi steam turbine was manufactured by a different vendor and is rated at 468 MW. The generator thus was capable of reliably producing more electrical output than Mitsubishi stated its steam turbine was designed to supply.

33. The greater weight of the evidence establishes that the Mitsubishi steam turbine was designed to operate at 420 MW of output and that 420 MW was an operational limitation of the turbine.

OUTAGES AND BLADE FAILURES

34. DEF has classified the periods during which the Bartow Plant has been operational as: Period 1-- from June 2009 until March 2012; Period 2-- from April 2012 until August 2014; Period 3-- from December 2014 until April 2016; Period 4-- from May 2016 until October 2016; and Period 5-- from December 2016 until February 2017.

35. DEF placed the Bartow Plant into commercial service in June 2009. Later that year, DEF began operating the steam turbine above 420 MW

under varying system conditions. Mr. Swartz estimated that DEF operated the steam turbine above 420 MW about half the time between June 2009 and March 2012, the time span that has been designated as Period 1 of the five periods in question in this proceeding. The Bartow Plant operated for a total of 21,734 hours during Period 1.

36. In March 2012, while conducting a routine inspection of the steam turbine during a planned power outage, DEF found that [redacted] DEF consulted with Mitsubishi regarding the damage. Mitsubishi inspected the blades and recommended [redacted]

37. Mitsubishi concluded that the damage to the blades was caused by [redacted] Up to this point, Mitsubishi had [redacted] DEF and Mitsubishi had assumed that if [redacted] of the steam turbine, then the [redacted] would be acceptable. After discovery of the blade failure in March 2012, [redacted][3]

38. Period 2 commenced in April 2012 and ended in August 2014, a period of 28 months. At the beginning of Period 2, DEF and Mitsubishi replaced all of the L-0 blades on the affected end of the LP turbine with [redacted]

39. During Period 2, DEF operated the steam turbine a total of 21,284 hours. For all but two hours of this period, DEF operated the steam turbine

[3] [redacted]

at less than 420 MW and complied with Mitsubishi's [redacted]

40. During a planned outage beginning in August 2014, Mitsubishi replaced the [redacted] used in Period 2 with [redacted] thus beginning Period 3. During this planned outage, DEF and Mitsubishi conducted an inspection of the Period 2 [redacted] blades. The inspection revealed a [redacted] consistent with ordinary usage over the course of Period 2. There was no damage noted to [redacted] There was some [redacted] described as [redacted]

41. Between Period 2 and Period 3, Mitsubishi and DEF installed [redacted] in the steam turbine to allow for [redacted] which they expected would help them to understand why the L-0 blades were experiencing damage and to [redacted] protect the equipment.

42. It was undisputed that DEF's operation of the steam turbine was prudent at all times during Period 2.

43. Period 3 commenced in December 2014 and ended in April 2016. During Period 3, DEF operated the steam turbine a total of 10,286 hours. DEF never exceeded 420 MW of output, except for a [redacted]

44. During Period 3, Mitsubishi [redacted] on the steam turbine. The [redacted]

calculated that the Bartow steam turbine experienced approximately [redacted] and Mitsubishi's fleet experience had been [redacted] on last stage blades including the 40" L-0 blades. Mitsubishi was uncertain what impact the L-0 blades would experience at [redacted]

45. Mitsubishi concluded that [redacted]

46. It was undisputed that DEF's operation of the steam turbine was prudent at all times during Period 3.

47. Despite DEF's having [redacted] DEF and Mitsubishi's examination of the steam turbine at the end of Period 3 revealed that [redacted] DEF and Mitsubishi decided that [redacted] were installed.

48. Period 4 commenced in June 2016 and ended five months later in October 2016. During Period 4, DEF operated the steam turbine a total of 2,942 hours. DEF did not exceed 420 MW of output during this period and [redacted]

49. Just five months after the commencement of Period 4, DEF detected vibration changes in the LP turbine and stopped operation of the steam turbine to inspect the L-0 blades. During this inspection, DEF and Mitsubishi once again found several damaged L-0 blades. At the time of this blade damage, DEF was operating the steam turbine below 420 MW and observing the operating parameters established by Mitsubishi [redacted]

50. It was undisputed that DEF's operation of the steam turbine was prudent at all times during Period 4.

51. Period 5 began in December 2016 and ended two months later in February 2017.

52. At the beginning of Period 5, DEF and Mitsubishi [redacted] of 1,561 hours. DEF never exceeded 420 MW of output during this period and operated the steam turbine within the operating parameters established by Mitsubishi [redacted]

54. On February 9, 2017, the steam turbine was removed from service when DEF detected the presence of sodium in the steam water cycle. The cooling water used for the condenser is salt water from Tampa Bay. Mr. Swartz testified that any indication of sodium inside the condenser above minute amounts is alarming. During this shutdown, DEF performed an inspection of the steam turbine and discovered that a [redacted]

device known as a rupture disk had failed in the LP turbine and that the L-0 blades were damaged. DEF concluded that [redacted] the rupture disk. This forced outage lasted until April 8, 2017.

55. Based on the sequence of events, DEF was able to determine with certainty that the blade damage during Period 5 occurred on February 9, 2017. At that time, DEF was operating the steam turbine below 420 MW and within the operating parameters established by Mitsubishi [redacted]

56. It was undisputed that DEF's operation of the steam turbine was prudent at all times during Period 5.

57. During the February 2017 forced outage of the steam turbine, DEF continued to operate the Bartow Plant with the gas turbines running in simple cycle mode.

58. DEF took three primary actions in the wake of the Period 5 outage: a root cause analysis ("RCA") team, established after the first blade failure in Period 1, continued its mission to investigate and prepare an RCA; a restoration team was formed to bring the steam turbine back online; and a team was formed to evaluate a long-term solution for the steam turbine.

[redacted]

60. Instead, DEF and Mitsubishi installed pressure plates in place of the L-0 blades as an interim solution that would bring the steam turbine back into operation quickly and give Mitsubishi and DEF time to develop a permanent solution. A pressure plate is a non-rotating plate that has holes drilled into it. The pressure plate reduces the pressure of the steam passing through a steam turbine, keeping the steam from damaging the unit's condenser. A pressure plate does not use the steam passing through it to produce electricity and therefore decreases the efficiency of a steam turbine.

The pressure plate applied by DEF limited the output of the steam turbine to 380 MW.

61. The parties have agreed and the undersigned accepts that the period of the steam turbine's "de-rating" from 420 MW to 380 MW should be calculated as running from April 2017 through the end of September 2019.

THE MITSUBISHI AND DEF ROOT CAUSE ANALYSES

62. Mitsubishi's [redacted] during Period 3 [redacted] of its RCA in a 35-page "Bartow RCA Summary" ("Mitsubishi RCA"). The Mitsubishi RCA documented the [redacted]

64. The Mitsubishi RCA also stated that an [redacted]

65. After the discovery of the blade damage in March 2012, DEF formed an RCA team and began a years-long RCA process that ended with its own February 6, 2018, RCA report ("DEF RCA").

66. DEF's RCA [redacted]

67. [redacted]

team produced between 2012 and the final DEF RCA in February 2018. Mr. Swartz declined to call these documents "drafts" of the RCA, preferring to say they were "working papers" that provided snapshots of the RCA team's investigation at a given time. Mr. Swartz emphasized that only the February 2018 RCA report stated DEF's official position as to the cause of the blade failures.

69. The working papers indicate that as late as October 15, 2016, DEF [redacted]

70. The working papers show that as late as June 26, 2017, DEF maintained that one of "the most significant contributing factors toward root

cause of the history of Bartow Unit 4 L-0 events" was [redacted]

71. OPC accurately states that the DEF working documents demonstrate that during the RCA process, before and after the Period 5 event, DEF consistently identified excessive steam flow in the LP turbine as one of the "most significant contributing factors" toward blade failure over the history of the steam turbine, the [redacted].

72. Mr. Swartz attempted to minimize the significance of the working papers by stating that DEF was obliged to investigate the issue of excessive steam flow because [redacted]

73. DEF's final RCA did not include a statement that excessive steam flow was a significant contributing factor in the blade failures. The final DEF RCA instead noted that "excessive steam flow" had been a "potential" operational factor that DEF examined during the RCA process. The RCA states that DEF had been unable to find a correlation between [redacted] and the five failure periods. In particular, the RCA pointed out that [redacted]

74. OPC concludes that the final DEF RCA was DEF's self-serving attempt to exonerate its own overloading of the steam turbine and to shift responsibility onto Mitsubishi for [redacted] DEF contends that it simply followed the data throughout the RCA process and arrived at the only conclusion consistent with the findings of its engineers.

POST-RCA ACTIONS

75. As noted above, pressure plates were installed in place of the L-0 blades at the conclusion of Period 5. The pressure plates allowed DEF to keep the steam turbine running at a lower level of output while it sought a permanent solution to the blade damage problem.

76. In 2018, DEF solicited proposals to implement a long-term solution that would allow it to reliably operate the steam turbine to support 450 MW of electrical output from the generator. Three vendors responded. [redacted] DEF selected the Mitsubishi proposal.

77. In December 2019, Mitsubishi installed [redacted] As of the hearing date, DEF had operated the Bartow Plant with the [redacted] L-0 blades without incident on a 1x1, 2x1, and 3x1 configuration, but had yet to operate with all four combustion turbines.

78. OPC points out that in proposing its [redacted] blades, Mitsubishi did not waver from the conclusion of its RCA. Mitsubishi stated the following as the first three bullet points in the introduction to its paper describing the testing of the [redacted] blades:

[redacted]

REPLACEMENT POWER AND DE-RATING COSTS

79. The record evidence established that the replacement power costs stemming from the February 2017 outage are $11.1 million.

80. Further, the record evidence established that DEF incurred replacement power costs from May 2017 through September 2019, the period of the "de-rating" of the steam turbine, i.e., the reduction in output from 420 MW to 380 MW while it operated with the pressure plate. Those costs, calculated by year, are $1,675,561 (2017), $2,215,648 (2018), and $1,125,573 (2019), for a total of $5,016,782.

81. Therefore, the total replacement power costs incurred as a result of DEF's operation of the steam turbine are $16,116,781, without considering interest.

DISCUSSION

82. As noted above, the parties have a fundamental disagreement as to the significance of the 420 MW maximum output designation that Mitsubishi placed on the steam turbine. The Energy Information Administration of the U.S. Department of Energy defines "generator nameplate capacity" as the "maximum rated output of a generator, prime mover, or other electric power production equipment under specific conditions designated by the manufacturer." There was no dispute that 420 MW was the "nameplate capacity" of the Mitsubishi steam turbine. OPC argues that the nameplate capacity of 420 MW is by definition an operational limitation and that operation of the steam turbine beyond the maximum rated output of 420 MW threatened safe operation.

83. OPC points to the fact that there are 3 [redacted]

[redacted] OPC notes that the DEF RCA report does not explain why a [redacted]

84. As to DEF's argument that [redacted] OPC replies that had DEF operated the turbine within its original operating limitations during Period 1, there is every reason to believe that the original L-0 blades would still be functioning, consistent with [redacted] In other words, there would have been no Periods 2, 3, 4, or 5 but for DEF's actions during Period 1.

85. OPC points out that neither DEF nor any other subsidiary of Duke Energy had experience running a 4x1 combined cycle plant prior to purchasing the Mitsubishi steam turbine and commencing operation of the Bartow Plant. Further, neither DEF nor Mitsubishi had any experience operating a steam turbine at the [redacted]

86. Given the lack of experience on either side, OPC contends that DEF should have consulted Mitsubishi before purchasing the steam turbine to ask whether Mitsubishi believed it was capable of an output in excess of its nameplate capacity of 420 MW. [redacted]

87. OPC's expert witness, Richard Polich, pointed out that Mitsubishi's consultant ran over [redacted]

88. Mr. Polich testified that the Mitsubishi steam turbine was an aftermarket unit designed for a [redacted] To support his opinion, Mr. Polich pointed out that when DEF finally did ask whether the turbine could run past 420 MW, [redacted]

89. DEF ran the unit beyond 420 MW without consulting Mitsubishi. Mr. Polich found it a tribute to the design of the [redacted] 40" L-0 blades that they did not suffer damage sooner than they did. The steam turbine operated from June 2009 until March 2012 before the blade damage was noted. It was impossible to state exactly when the blade damage occurred in Period 1, but Mr. Polich opined that the damage was most likely cumulative.[4]

90. Mr. Polich noted that the blade failure in Period 5 was the fastest of any period, though the [redacted] Mr. Polich further noted that the DEF RCA did not address why the blades lasted longer in Periods 1 and 2 than in the other three periods. Mr. Polich reasonably concluded that there had to be something about the blades' [redacted]

[4] DEF made much of the fact that it could not be said precisely when during Period 1 the damage to the blades occurred, pointing out that there was a 50-50 chance that the blades were damaged when the turbine was operating below 420 MW. This argument fails to consider the cumulative wear caused by running the unit in excess of its capacity half of the time. The exact moment the damage occurred is beside the point.

that allowed them to last longer, and something in the [redacted] that caused them to fail quickly.

91. Mr. Polich believed that the [redacted] He noted that there were 28 months of operation below 420 MW during Period 2 and that there was basically no damage to the blades beyond the usual [redacted]

92. Mr. Polich thought that [redacted] Mr. Polich did not believe the five periods could be correlated, [redacted]

93. Mr. Polich testified that DEF would have acted prudently from both a warranty and a regulatory perspective by requesting written verification from Mitsubishi that the steam turbine could be safely operated above 420 MW of output.

94. Mr. Swartz countered that it would not be a "typical conversation" in the industry to ask Mitsubishi whether and how long the unit could be operated above 420 MW. He pointed out that pounds per hour per square foot of steam flow is not a parameter that can be measured during operation. It is a calculated number that DEF could not possibly have used to govern operation of the turbine.

95. Mr. Swartz testified that "420 MW" is the electrical output of the generator, which is coupled to the steam turbine. The steam turbine's operation is governed by parameters such as pressures, steam flows, and temperatures. Mr. Swartz stated that it is common in the industry to speak in terms of megawatts to get a feel for the size of the unit, but that generator output is dependent on many factors.

96. Mr. Swartz stated that when Mitsubishi criticized DEF for operations above 420 MW, it was using that term as a proxy for [redacted] It was his opinion that 420 MW was not an operational limit on the steam turbine.

97. Mr. Swartz testified that the [redacted] He stated that operation of the steam turbine above 420 MW could be correlated with [redacted], but many other factors are involved in determining what a generator can produce.

98. Mr. Swartz stated that the power factor was the key to DEF's ability to operate the steam turbine above 420 MW. Mitsubishi used [redacted] with a power factor of [redacted] to predict an output of 420 MW. Using the same operating factors, DEF was able to run the steam turbine at a power rating between .97 and .995. Mr. Swartz testified that this increased efficiency enabled the Bartow generator to operate above 420 MW.

99. Mr. Swartz conceded that the [redacted] at least from DEF's perspective. If DEF was able to obtain more, such was to the ultimate benefit of its ratepayers and was consistent with the operating limitations set forth in the Purchasing Agreement.

100. OPC responds that the record of this proceeding contains no indication that at any time during the five-year long, continuous, iterative RCA process did DEF's engineers suggest that the power factor of [redacted] in [redacted] an indication that the steam turbine output of 420 MW could be safely exceeded.

101. OPC points to several statements recorded during the RCA process indicating that DEF's engineers and Mitsubishi alike acknowledged that 420 MW was the design limit of the steam turbine: [redacted]

[redacted]

102. OPC's essential criticism was that DEF pushed the Mitsubishi steam turbine beyond its operational limits, whether the issue is framed in terms of megawatts of electrical output beyond the design point or in terms of steam flow [redacted] The evidence was clear that Mitsubishi did not contemplate DEF's operation of the steam turbine beyond the [redacted] The evidence was also clear that DEF made no effort before the fact to notify Mitsubishi of its intended intensity of operation or to ask Mitsubishi whether it could safely exceed the [redacted] Mr. Swartz was unable to explain away this criticism and thus DEF failed to meet its burden of demonstrating that it prudently operated the Bartow Plant during the times relevant to this proceeding.

CONCLUSIONS OF LAW

103. DOAH has jurisdiction of the subject matter of and the parties to this proceeding. §§ 120.569 and 120.57(1), Fla. Stat.

104. The Commission has the authority to regulate electric utilities in the State of Florida pursuant to the provisions of chapter 366, including sections 366.04, 366.05, and 366.06.

105. An "electric utility" is defined as "any municipal electric utility, investor-owned electric utility, or rural electric cooperative which owns, maintains, or operates an electric generation, transmission, or distribution system within the state." § 366.02(2), Fla. Stat.

106. DEF is an investor-owned electric utility operating within the State of Florida subject to the jurisdiction of the Commission pursuant to chapter 366.

107. OPC, FIPUG, and White Springs are parties to the Fuel Clause docket, which included the issues to be resolved here, and as such are entitled to participate as parties in this proceeding.

108. This is a de novo proceeding. § 120.57(1)(k), Fla. Stat. Petitioner, DEF, has the burden of proving, by a preponderance of the evidence, that it acted prudently in its actions and decisions leading up to and in restoring the unit to service after the February 2017 forced outage at the Bartow Plant. Additionally, DEF must prove by a preponderance of the evidence that no adjustment to replacement power costs should be made to account for the fact that after the installation of a pressure plate in March 2017, the Bartow Plant could no longer produce its rated nameplate capacity of 420 MW. *Dep't of Transp. v. J.W.C. Co.*, 396 So. 2d 778, 788 (Fla. 1st DCA 1981); § 120.57(1)(j), Fla. Stat.

109. The legal standard for determining whether replacement power costs are prudent is "what a reasonable utility manager would have done, in light of the conditions and circumstances that were known, or should [have] been known, at the time the decision was made." *S. Alliance for Clean Energy v. Graham*, 113 So. 3d 742, 750 (Fla. 2013).

110. DEF failed to demonstrate by a preponderance of the evidence that its actions during Period 1 were prudent. DEF purchased an aftermarket steam turbine from Mitsubishi with the knowledge that it had been manufactured to the specifications of Tenaska with a design point of 420 MW of output. Mr. Swartz's testimony regarding the irrelevance of the 420 MW limitation was unpersuasive in light of the documentation that after the initial blade failure, DEF itself accepted the limitation and worked with Mitsubishi to find a way to increase the output of the turbine to [redacted]

111. DEF's RCA concluded that the blade failures were caused [redacted] This conclusion is belied by the fact that [redacted] Mitsubishi cannot be faulted for

[redacted] in a way that would allow an operator to run the turbine consistently beyond its capacity.

112. [redacted]

113. Mr. Polich persuasively argued that it would have been simple prudence for DEF to ask Mitsubishi about the ability of the turbine to operate continuously in excess of 420 MW output before actually operating it at those levels. DEF understood that the blades had been designed for the Tenaska 3x1 configuration and should have at least explored with Mitsubishi the wisdom of operating the steam turbine with steam flows in excess of those anticipated in the original design.

114. The record evidence demonstrated an [redacted] that vibrations associated with high energy loadings were the primary cause of the L-0 blade failures. DEF failed to satisfy its burden of showing its actions in operating the steam turbine in Period 1 did not cause or contribute significantly to the vibrations that repeatedly damaged the L-0 blades. To the contrary, the preponderance of the evidence pointed to DEF's operation of the steam turbine in Period 1 as the most plausible culprit.

115. DEF demonstrated by a preponderance of the evidence that its actions during Periods 2 through 5 were prudent.

116. DEF argues that even if it failed to exercise prudence during Period 1, those actions were so attenuated by DEF's subsequent actions during Periods 2 through 5 that the outage and de-rating that began in 2017 cannot be fairly attributed to DEF's failures from 2009 through March 2012. If the imprudent operation in Period 1 did not cause the Period 5 outage, then the imprudent operation cannot be a basis for disallowance of the replacement power costs at issue.

117. OPC argues that Periods 2 through 5 would not have been necessary had DEF operated the turbine within its original operating limitations during Period 1. OPC contends that, based on [redacted], there is every reason to believe that the original L-0 blades would still be functioning but for DEF's overstressing them in Period 1.

118. OPC states that the applicable standard for prudence review is how a prudent and reasonable utility manager would have operated a new steam turbine under the conditions and circumstances which were known, or reasonably should have been known, when decisions were made in 2008 through 2012. OPC argues that it was imprudent and unreasonable for DEF to regularly supply steam to the steam turbine at levels causing the steam turbine to operate above the design point of 420 MW, especially given the fact that the steam turbine was not designed for the Bartow Plant and was sold to DEF with an [redacted]

119. It is speculative to state that the original Period 1 L-0 blades would still be operating today had DEF observed the [redacted] of 420 MW. It is not speculative to state that the events of Periods 2 through 5 were precipitated by DEF's actions during Period 1. It is not possible to state what would have happened from 2012 to 2017 if the excessive loading had not occurred, but it is possible to state that events would not have been the same.

120. In his closing argument, counsel for White Springs summarized the equities of the situation very well:

> You can drive a four-cylinder Ford Fiesta like a V8 Ferrari, but it's not quite the same thing. At 4,000 RPMs, in second gear, the Ferrari is already doing 60 and it's just warming up. The Ford Fiesta, however, will be moaning and begging you to slow down and shift gears. And that's kind of what we're talking about here.
>
> It's conceded as fact that the root cause of the Bartow low pressure turbine problems is [redacted]

> [redacted] caused repeatedly over time. The answer to the question is was this due to the way [DEF] ran the plant or is it due to a [redacted] Well, the answer is both.
>
> The fact is that [DEF] bought a steam turbine that was already built for a different configuration that was in storage, and then hooked it up to a configuration ... that it knew could produce much more steam than it needed. It had a generator that could produce more megawatts, so the limiting factor was the steam turbine.
>
> On its own initiative, it decided to push more steam through the steam turbine to get more megawatts until it broke.
>
> * * *
>
> So from our perspective, [DEF] clearly was at fault for pushing excessive steam flow into the turbine in the first place. The repair which has been established ... may or may not work, but the early operation clearly impeded [DEF's] ability to simply claim that Mitsubishi was entirely at fault. And under those circumstances, it's not appropriate to assign the cost to the consumers.

121. The greater weight of the evidence supports the conclusion that DEF did not exercise reasonable care in operating the steam turbine in a configuration for which it was not designed and under circumstances which DEF knew, or should have known, that it should have proceeded with caution, seeking the cooperation of Mitsubishi to devise a means to operate the steam turbine above 420 MW.

122. Given DEF's failure to meet its burden, a refund of replacement power costs is warranted. At least $11.1 million in replacement power was required during the Period 5 outage. This amount should be refunded to DEF's customers.

123. DEF failed to carry its burden to show that the Period 5 blade damage and the required replacement power costs were not consequences of DEF's imprudent operation of the steam turbine in Period 1.

124. The de-rating of the steam turbine that required the purchase of replacement power for the 40 MW loss caused by installation of the pressure plate was a consequence of DEF's failure to prudently operate the steam turbine during Period 1. Because it was ultimately responsible for the de-rating, DEF should refund replacement costs incurred from the point the steam turbine came back online in May 2017 until the start of the planned fall 2019 outage that allowed the replacement of the pressure plate with the [redacted] in December 2019. Based on the record evidence, the amount to be refunded due to the de-rating is $5,016,782.

125. The total amount to be refunded to customers as a result of the imprudence of DEF's operation of the steam turbine in Period 1 is $16,116,782, without interest.

RECOMMENDATION

Based upon the foregoing Findings of Fact and Conclusions of Law, it is RECOMMENDED that the Public Service Commission enter a final order finding that Duke Energy Florida, LLC, failed to demonstrate that it acted prudently in operating its Bartow Unit 4 plant and in restoring the unit to service after the February 2017 forced outage, and that Duke Energy Florida, LLC, therefore may not recover, and thus should refund, the $16,116,782 for replacement power costs resulting from the steam turbine outages from April 2017 through September 2019.

DONE AND ENTERED this 27th day of April,2020, in Tallahassee, Leon County, Florida.

Lawrence P. Stevenson

LAWRENCE P. STEVENSON
Administrative Law Judge
Division of Administrative Hearings
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NOTICE OF RIGHT TO SUBMIT EXCEPTIONS

All parties have the right to submit written exceptions within 15 days from the date of this Recommended Order. Any exceptions to this Recommended Order should be filed with the agency that will issue the Final Order in this case.

ATTACHMENT B

STATE OF FLORIDA
DIVISION OF ADMINISTRATIVE HEARINGS

IN RE: FUEL AND PURCHASED POWER COST RECOVERY CLAUSE WITH GENERATING PERFORMANCE INCENTIVE FACTOR
/

Case No. 19-6022

PSC Docket No. 20190001-EI

DUKE ENERGY FLORIDA, LLC'S, EXCEPTIONS TO THE RECOMMENDED ORDER

Duke Energy Florida, LLC ("DEF"), pursuant to section 120.57(1)(k), Florida Statutes, and rule 28-106.217, Florida Administrative Code, hereby submits its exceptions to the Administrative Law Judge's ("ALJ") Recommended Order dated April 27, 2020 ("RO").[1]

INTRODUCTION

When considering the RO, the Public Service Commission ("PSC") may reject or modify the conclusions of law recommended by the ALJ.[2] When rejecting or modifying a conclusion of law, the PSC must state with particularity its reasons for doing so and must make a finding that the PSC's substituted conclusion of law is as or more reasonable than that which was rejected or modified.[3] To be clear, on issues of law, the PSC is not required to defer to the ALJ,[4] and where the issue of law under review is infused with overriding policy considerations, the PSC, not the ALJ, should decide the issue of law.[5]

The PSC may also reject or modify a finding of fact contained in the RO if the PSC determines from a review of the entire record, and states with particularity in the final order, that the findings of fact were not based upon competent substantial evidence or that the proceedings on

[1] The Hearing Transcript will be cited as "T. p.___." The Recommended Order will be cited as RO. ¶__. Joint exhibits will be cited as Jt. Ex. ___, p. ___. OPC's exhibits will be cited as "OPC Ex.__, p. __." FIPUG's exhibits will be cited as "FIPUG Ex.__, p.__." PCS Phosphate's exhibits will be cited as "PCS Phosphate Ex.__, p.__."
[2] Section 120.57(1)(l), Florida Statutes.
[3] *Id.*
[4] *State Contracting & Eng'g Corp. v. Dep't of Transp.*, 709 So. 2d 607, 609 (Fla. 1st DCA 1998).
[5] *Pillsbury v. State, Dep't of Health & Rehabilitative Servs.*, 744 So. 2d 1040, 1042 (Fla. 2d DCA 1999) ("if the matter under review is susceptible of ordinary methods of proof, such as determining the credibility of witnesses or the weight to be given particular evidence, the matter should be determined by the hearing officer. If, however, the matter is infused with overriding policy considerations, the issue should be left to the discretion of the agency.") (citing *Bush v. Brogan*, 725 So. 2d 1237 (Fla. 2d DCA 1990)).

which the findings were based did not comply with essential requirements of law.[6]

As detailed in DEF's exceptions below, the ALJ has proposed several conclusions of law that should be rejected both because they are inconsistent with the PSC's overriding policy considerations regarding public utilities in Florida and because the ALJ has improperly interpreted the facts when making those conclusions of law. While DEF takes exception to multiple findings of fact, due to the standard of review discussed above, DEF will not relitigate those points here nor ask this Commission to reweigh evidence. As discussed below, even accepting the ALJ's findings of fact, this Commission should still reject the ALJ's legal and policy conclusions.

DEF'S EXCEPTIONS TO THE CONCLUSIONS OF LAW

Exception to RO ¶ 110

DEF takes exception to the ALJ's conclusion in paragraph 110 that DEF failed to demonstrate that its actions during Period 1 were prudent. First, it is helpful to re-state the standard this Commission routinely interprets and applies to determine whether a utility's actions are prudent. The ALJ correctly stated part of the test for prudence[7], but he left out an important factor. Namely, that hindsight cannot form the basis of a prudence determination. *Fla. Power Corp. v. Public Service Com'n*, 456 So. 2d 451, 452 (Fla. 1984). As support for the ALJ's conclusion, the ALJ relies on evidence that the steam turbine ("ST") DEF purchased for installation at the Bartow Plant had a nameplate rating of 420 MW and that DEF [redacted] after the initial blade failure.

[6] Section 120.57(1)(l), Florida Statutes.

[7] The standard for determining prudence is what a reasonable utility manager would have done, in light of the conditions and circumstances that were known, or should have been known, at the time the decision was made. *S. Alliance for Clean Energy v. Graham*, 113 So. 3d 742, 750 (Fla. 2013) (RO ¶ 109).

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Before committing to purchase the ST, DEF contracted with Mitsubishi to assess whether the ST design conditions were compatible with the Bartow Plant's proposed 4x1 combined cycle design configuration. As part of this assessment, DEF informed Mitsubishi that DEF intended to operate the Bartow Plant and the ST in 4x1 configuration with a power factor exceeding [redacted] which would result in the generation of more than 420 MW. T. 42, 135-136, 147-148, 213-215, 234, 258, 278, 356. During Period 1, DEF operated the ST in accordance with the operating parameters specified by Mitsubishi for operation of the ST, which did not include a parameter that prohibited DEF from operating the ST in excess of 420 MW. T. 272, 284, 346, 377-378. It was only after the initial blade failure during Period 1 that [redacted] T. 260. DEF operated the ST in accordance with [redacted] but asked Mitsubishi to determine whether anything could be done [redacted] during Period 1. In response, Mitsubishi [redacted] T. 152, 277. Mitsubishi did not determine it was necessary [redacted]

Significantly, Mitsubishi did not conclude that DEF operated the ST during Period 1 in violation of the operating parameters it provided DEF for the ST. Instead, MHPS surmised that [redacted]. T. 97, 386. Moreover, the fact that Mitsubishi [redacted] makes plain that Mitsubishi believed the ST was capable of operating above 420 MW [redacted]

In the utility industry, the nameplate rating of a steam turbine is not regarded as an

"operating parameter" above which the steam turbine may not be operated. T. 140-143, 281-282, 284. Instead, the general standard followed in the utility industry is to operate steam turbines within operating parameters provided by the original equipment manufacturer while also striving to achieve the most efficiency for utility customers. T. 141. Operating parameters provided by Mitsubishi for the ST included steam pressures, operating temperatures and other parameters common to steam turbines. T. 346, 377-378. Nothing in DEF's experience operating the Bartow Plant or in Mitsubishi's analysis of whether the ST design conditions were compatible with the Bartow Plant indicated that DEF's operation of the ST in accordance with the operating parameters established by Mitsubishi would result in damage to the L-0 blades. Based upon DEF's and Mitsubishi's combined prior knowledge, DEF had appropriate operating parameters in place, and DEF properly followed these parameters. Only an after-the-fact analysis determined the specific cause of the damage to the L-0 blades.

Indeed, the ALJ's conclusion that the 420MW nameplate rating was an operating parameter is based, at least in part, on DEF's alleged "acceptance" of the limitation. The ALJ states that DEF accepted the limit because it (1) [redacted] and (2) requested that Mitsubishi [redacted] This conclusion is nonsensical because it does not support that DEF accepted the 420 MW as a limitation. Rather, it shows that DEF was acting as a prudent utility would be expected to act in such a situation. As this Commission is well aware, a prudent utility operates its generating units to maximize output for the benefit of its customers. Working with the manufacturer to ensure that the unit can be operated as DEF always intended it to run is not an acceptance of a previous limitation: it is a sign that DEF was acting prudently to protect its investment. Taken to its logical conclusion, the ALJ would have preferred DEF to simply fix the blades and back down the operation to 420 MW and not make any efforts whatsoever to operate

the unit in the most beneficial manner for its customers. What DEF learned through subsequent periods, however, is that [redacted] the blades still suffered damage. In sum, even though it continued to follow all OEM provided guidance. DEF is still being subjected to "Monday-morning quarterbacking" and findings of imprudence.

A preponderance of the evidence adduced at the final hearing reflects, and the PSC should conclude, that DEF prudently operated the ST during Period 1 in accordance with each of the operating parameters provided by Mitsubishi. This conclusion is as or more reasonable than the conclusion reached by the ALJ, which relied upon hindsight and would arbitrarily limit a utility's operation of a steam turbine to the turbine's nameplate rating regardless of whether the steam turbine has the capacity to safely operate at greater efficiency. The conclusion would also inhibit a utility's ability to maximize output for the benefit of its customers.

Exception to RO ¶ 111

DEF takes exception to the ALJ's conclusion in paragraph 111 that DEF's determination that the L-0 blade failures were the result of [redacted] is belied by the fact that [redacted] As reflected by Mitsubishi's own root cause analysis, [redacted] T. 97, 386. Despite the fact that DEF contracted with Mitsubishi to assess whether the ST design conditions were compatible with the Bartow Plant's proposed design configuration, Mitsubishi did not identify [redacted] as a potential problem at the Bartow Plant. Under these circumstances, comparing the ST with other Mitsubishi facilities is not beneficial to the prudence analysis at hand.

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It is more constructive to compare the blade failures that occurred at the ST during Period 1 (when the ST was operated above 420 MW) with the blade failures that occurred at the ST during Periods 2 through 5 (when the ST was operated below 420 MW). This comparison reveals that the L-0 blades may have failed when DEF was operating the ST above 420 MW but unequivocally suffered damage on four separate occasions when DEF was operating the ST below 420 MW. Indeed, the RO notes that it is not possible to determine when the damage occurred in period 1, and thus it is impossible to say how the unit was being operated at the time of damage; the RO mistakenly concludes that "the exact moment of damage is beside the point"[8] because it fails to account for cumulative wear to the machine. As a matter of law and regulatory policy, the ALJ's conclusion must be wrong – if the damage to the unit occurred prior to any alleged imprudence,[9] DEF cannot be held responsible for the consequences of the damage. It is as or more reasonable to conclude, therefore, that DEF's determination that the L-0 blade failures resulted from [redacted] is supported by a preponderance of evidence that the blades failed during prudent operation of the ST.

DEF takes further exception to the ALJ's conclusion in paragraph 111 that DEF operated the ST consistently beyond its capacity. As explained in DEF's exception to paragraph 110 above, the operating parameters provided by Mitsubishi for the ST were parameters common to steam turbines, including steam pressures and operating temperatures. T. 346, 377-378. DEF complied with these operating parameters. T. 272, 284, 346, 377-378. Mitsubishi provided DEF with no other operating parameters or capacities for the ST. It is, thus, as or more reasonable to conclude

[8] *See* RO, at fn. 11 ("DEF made much of the fact that it could not be said precisely when during Period 1 the damage to the blades occurred, point tout that there was a 50-50 chance that the blades were damaged when the turbine was operating below 420MW. This argument fails to consider the cumulative wear caused by running the unit in excess of its capacity half of the time. The exact moment the damage occurred is beside the point.").
[9] Again, DEF disputes that operation of a generation unit above nameplate capacity, but within all OEM provided operating parameters is imprudent or that the nameplate capacity is an operating parameter.

that DEF prudently operated the ST within each of the operating parameters provided by Mitsubishi.

Exception to RO ¶ 112

DEF takes exception to the ALJ's conclusion in paragraph 112 that Mitsubishi attributed the blade failure during Period 1 to [redacted] In fact, in its root cause analysis ("RCA") dated September 22, 2017, Mitsubishi determined that [redacted] (underscoring added) Jt. Ex. 82, p. 12 of 35. It is undisputed that DEF operated the ST below 420 MW during Periods 2 through 5. Jt. Ex. 80, P. 5; T. 285, 347-350, 352, 380. Because DEF always operated the ST below 420 MW during Periods 2 through 5 and the L-0 blades, nevertheless, suffered damage during each of those periods, it is more reasonable to conclude that the [redacted] that ultimately damaged the L-0 blades during Period 1 was not the result of DEF's operation of the ST above 420 MW, but was instead caused by L-0 blades that were not [redacted] by the Bartow Plant. T. 97, 386; Jt. Ex. 83. If the ST's manufacturer was not able anticipate that damage to the L-0 blades would result from operating the ST in accordance with the manufacturer's operating parameters, it would be unreasonable and contrary to the established prudence standard to expect DEF to have anticipated this. It is, therefore, as or more reasonable to conclude that the damage to the L-0 blades that occurred during Period 1 was the combined result of [redacted]

Exception to RO ¶ 113

DEF takes exception to the ALJ's conclusion in paragraph 113 that it would have been prudent for DEF to consult with Mitsubishi about the ability of the ST to operate above 420 MW

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and above steam flows anticipated in the original design for the ST. With respect to steam flows within the low pressure turbine where the L-0 blades are located, it is important to note that Mitsubishi provided DEF [redacted] T. 377-378. As such, it would be as or more reasonable to conclude that prudence did not require DEF to consult with Mitsubishi in connection with steam flow limits within the low-pressure turbine during Period 1 operation of the ST. As indicated above, the output of a steam turbine is not an "operating parameter" provided by a manufacturer; rather the output is a product that follows from operation within the manufacturer-provided parameters. T. 140-143, 281-282, 284. As also indicated above, Mitsubishi understood that DEF intended to operate the Bartow Plant in a configuration that would generate in excess of 420 MW. T. 42, 135-136, 147-148, 213-215, 234, 258, 278, 356. Due to this, it is as or more reasonable to conclude that prudence did not require DEF to consult with Mitsubishi before operating the ST within the operating parameters supplied by Mitsubishi.

Exception to RO ¶ 114

DEF takes exception to the ALJ's conclusion in paragraph 114 that DEF failed to satisfy its burden of showing its actions in operating the ST during Period 1 did not cause or contribute significantly to the vibrations that repeatedly damaged the L-0 blades. DEF operated the ST during Periods 1 through 5 in accordance with the manufacturer's operating parameters. T. 346, 377-378. DEF's actions and decisions in operating the ST within Mitsubishi's operating parameters were prudent. Consequently, it is as or more reasonable to conclude that DEF's actions in operating the ST in Period 1 did not cause or contribute significantly to the L-0 blade damage that occurred during Periods 1 through 5. In addition, it appears that the ALJ, by stating that DEF failed its burden to show that its actions did NOT cause the damage, is imposing an impossible standard of proving a negative. A utility does not have the burden to prove that something did not occur; such a requirement would be nearly impossible to meet. Rather, DEF's burden in this case was to show

that it acted as a reasonable utility manager would, given the facts known or reasonably knowable at the time, and without the benefit of hindsight review. Under that standard, even assuming that nameplate capacity was some sort of operational condition (which is not the case), the more appropriate interpretation of the facts determined in the case is that, because there was damage to the blades even when operating below 420 MW in later periods, DEF's actions in operating the unit such that the output was higher than 420 MW were prudent and not the cause of the damage.

Exception to RO ¶ 119

DEF takes exception to the ALJ's conclusion in paragraph 119 that it is not speculative to state that the events of Periods 2 through 5 were precipitated by DEF's actions during Period 1. It is undisputed that DEF prudently operated the ST during Periods 2 through 5. T. 347-350. It is also not disputed that there was no residual damage to any component within the ST following Period 1. T. 103-105. In fact, the only damage that resulted from Period 1 operation of the ST was to the L-0 blades, [redacted] at the conclusion of Period 1. Jt. Ex. 80, p. 5; T. 148, 150-151, 330. Consequently, there is no causal link between the Period 1 operation of the ST and the damage experienced by the L-0 blades during subsequent periods. Such a groundless contention cannot form the basis for denying a utility's fuel cost recovery. *In Re: Fuel & Purchased Power Cost Recovery Clause with Generation Performance Incentive Factor (Crystal River 3 1989 Outage)*, 91 FPSC 12:165, *12 (Dec. 9, 1991).

Since there is no dispute that DEF prudently operated the ST during Periods 2 through 5 and since it is also undisputed that there was no residual damage to the ST following Period 1 operation, it is as or more reasonable to conclude that the damage to the L-0 blades that occurred during Periods 2 through 5 was not precipitated by DEF's operation of the ST during Period 1.[10]

[10] Even if one were to assume DEF's operation of the ST above 420 MW during Period 1 was imprudent, if such operation did not cause the Period 5 outage, then it makes no difference whether DEF was imprudent in its operation

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To conclude, as the ALJ does, that DEF should be held responsible for the forced outage that occurred during Period 5 – despite any direct causal link between DEF's operation of the ST during Period 1 and the Period 5 outage – would set a dangerous precedent that would discourage utility operators from continuing to operate a power plant that may have been imprudently operated at some point for fear that any subsequent forced outage experienced by the power plant could be attributed to the earlier imprudence, regardless of how remote in time that earlier imprudence may have been.

Exception to RO ¶ 120

DEF takes exception to the ALJ's conclusion in paragraph 120 that it would not be appropriate to assign the cost of the February 2017 forced outage to the consumers. It is as or more reasonable to conclude that where, as here, a utility operates a power plant within the manufacturer's express operating parameters and does not know, or have reason to know, that such operation could result in a forced outage of the power plant, the utility should not be forced to bear the resulting replacement power costs.

Exception to RO ¶ 121

For the reasons explained above in its exceptions to RO ¶ 110, 111 and 113, DEF takes exception to the ALJ's conclusion in paragraph 121 that DEF did not exercise reasonable care in operating the ST and should have sought the cooperation of Mitsubishi prior to operating the ST above 420 MW. It is as or more reasonable to conclude that DEF was prudent in its decisions and actions leading up to, and in restoring the Bartow Plant to service after, the Bartow Plant's February 2017 forced outage and was not required to consult with Mitsubishi prior to operating the ST above 420 MW. There is also no record evidence to demonstrate that consulting with Mitsubishi prior to

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of the ST during portions of Period 1 because the replacement power costs at issue could not be said to be a result of the Company's mismanagement. See *Fla. Power Corp. v. Cresse*, 413 So. 2d 1187, 1190-1191 (Fla. 1982).

operating the ST above 420 MW would have resulted in any change in events.

Exception to RO ¶ 122

DEF takes exception to the ALJ's conclusion in paragraph 122 that DEF must refund power costs to DEF's customers. For the reasons explained above, DEF was prudent in its decisions and actions leading up to, and in restoring the Bartow Plant to service after, the Bartow Plant's February 2017 forced outage. Consequently, it is as or more reasonable to conclude that DEF is not required to refund power costs to its customers.

Exception to RO ¶ 123

For the reasons set forth in its exception to the ALJ's conclusion in paragraph 110, DEF takes exception to the ALJ's conclusion in paragraph 123 that DEF failed to show that it operated the ST prudently during Period 1. It is as or more reasonable to conclude that DEF carried its burden to show that it prudently operated the ST during Period 1 within each of the operating parameters provided by Mitsubishi.

DEF takes further exception to the ALJ's conclusion in paragraph 123 that DEF failed to meet its burden of showing that the Period 5 blade damage and the resulting replacement power costs were not the consequence of DEF's operation of the ST during Period 1. Because DEF proved by a preponderance of evidence that its operation of the ST during Period 1 was prudent and because it is undisputed that DEF's operation of the ST during Periods 2 through 5 was also prudent, it is as or more reasonable to conclude that the Period 5 blade damage and resulting replacement power costs were not the consequence of DEF's operation of the ST during Period 1.

Exception to RO ¶ 124

DEF takes exception to the ALJ's conclusions in paragraph 124 that the purchase of replacement power for the 40 MW loss caused by installation of the pressure plate was a consequence of DEF's failure to prudently operate the ST during Period 1. Because DEF proved

by a preponderance of evidence that its operation of the ST during Period 1 was prudent and because it is undisputed that DEF's operation of the ST during Periods 2 through 5 was also prudent, it is as or more reasonable to conclude that the installation of the pressure plate was not the consequence of DEF's operation of the ST during Period 1.

DEF takes further exception to the ALJ's conclusion in paragraph 124 that DEF should be required to refund replacement power costs related to the installation of the pressure plate. For the reasons explained above, DEF was prudent in its decisions and actions leading up to, and in restoring the Bartow Plant to service after, the Bartow Plant's February 2017 forced outage. Consequently, it is as or more reasonable to conclude that DEF is not required to refund power costs to its customers.

Exception to RO ¶ 125

DEF takes exception to the ALJ's conclusions in paragraph 125 that DEF was imprudent in its operation of the ST during Period 1 and, consequently, should be required to refund $16,116,782 to its customers. For the reasons discussed at length above, it is as or more reasonable to conclude that DEF operated the ST prudently at all times relevant to the replacement power costs and is, therefore, not required to refund any amount to its customers.

CONCLUSION

As detailed above, the above-referenced conclusions of law recommended by the Administrative Law Judge are inconsistent with the standard of prudence delineated in this Commission's precedent as well as the Commission's overriding policy considerations regarding public utilities in Florida. Adoption of the ALJ's conclusions would send negative operational signals to the state's utilities; specifically, adoption of the RO would signal that utilities should not

strive to maximize the efficient output of generating units, which, contrary to logic and economic principles, would result in limiting operations of the most efficient and economic sources of generation in favor of less efficient, less economic, and less environmentally friendly sources of generation (e.g., oil-fired peaker units). Moreover, it would send a signal to all utilities that, regardless of compliance with all industry-recognized operational parameters, they may still be found imprudent based on failure to comply with a later-established operational parameter (unrecognized at the time); this would upend the well-established prudence standard and subject all utilities to increased risk and increased costs which are eventually borne by customers. This Commission should reject these conclusions.

Respectfully submitted this 12th day of May 2020.

/s/ Matthew R. Bernier
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Attachment A

ATTACHMENT C

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Fuel and Purchased Power Cost Recovery Clause with Generating Performance Incentive Factor	Docket No. PSC-20190001-EI DOAH Case No. 19-6022

OFFICE OF PUBLIC COUNSEL, PCS PHOSPHATE – WHITE SPRINGS, AND THE FLORIDA INDUSTRIAL POWER USERS GROUP JOINT RESPONSE TO DUKE ENERGY FLORIDA, LLC'S EXCEPTIONS TO RECOMMENDED ORDER

The Office of Public Counsel, PCS Phosphate – White Springs, and the Florida Industrial Power Users Group, pursuant to section 120.57(1)(k), Florida Statutes (2020), and Rule 28-106.217, Florida Administrative Code, jointly respond to the Exceptions submitted by Duke Energy Florida, LLC ("DEF") to the Recommended Order in the above-styled matter. This Response is being submitted confidentially only because it is required due to a claim of confidentiality DEF has made to the Commission on behalf of the original equipment manufacturer.

OVERVIEW

The Public Service Commission ("PSC" or "Commission") forwarded this matter to the Division of Administrative Hearings on November 8, 2019, and requested that an Administrative Law Judge ("ALJ") conduct a formal evidentiary hearing on the following issues of disputed material fact:

> ISSUE 1B: Was DEF prudent in its actions and decisions leading up to and in restoring the unit to service after the February 2017 forced outage at the Bartow plant, and if not, what action should the Commission take with respect to replacement power costs?
>
> ISSUE 1C: Has DEF made prudent adjustments, if any are needed, to account for replacement power costs associated with any impacts related to the de-rating of the Bartow plant? If adjustments are needed and have not been made, what adjustment(s) should be made?

The Division of Administrative Hearings assigned an ALJ who conducted a formal evidentiary hearing on February 4 and 5, 2020. The parties collectively presented the live testimony of two expert witnesses, submitted extensive additional pre-filed testimony and 34 exhibits into evidence including a voluminous composite exhibit and other records. The official transcript of the final hearing is contained in three volumes, not including exhibits and additional pre-filed testimony admitted into evidence.

At the conclusion of the evidentiary hearing all parties, including the Commission, submitted detailed proposed recommended orders containing proposed findings of fact and conclusions of law. After duly considering the entirety of the record, applicable law, and the proposed recommended orders, the ALJ issued a detailed Recommended Order containing numerous Findings of Fact and Conclusions of Law, and recommending that the Commission enter a Final Order finding that:

> Duke Energy Florida, LLC, failed to demonstrate that it acted prudently in operating its Bartow Unit 4 plant and in restoring the unit to service after the February 2017 forced outage, and that Duke Energy Florida, LLC, therefore may not recover, and thus should refund, the $16,116,782 for replacement power costs resulting from the steam turbine outages from April 2017 through September 2019.

DEF submitted twelve exceptions to the Recommended Order. In spite of stating that it would "not relitigate those [factual] points ... nor ask this Commission to reweigh evidence," each of DEF's exceptions asks the Commission to reject findings of fact that, as demonstrated below, are supported by competent substantial evidence. The exceptions also ask the Commission to invade the exclusive province of the ALJ and make new findings of fact, often without citing to any portion of the record, and based on such new findings to overturn the ALJ's ultimate determination. For the reasons stated below, the Commission should reject each of the DEF exceptions and adopt the findings of the Recommended Order.

THE COMMISSION'S SCOPE OF AUTHORITY WHEN RULING ON EXCEPTIONS

The Commission has limited authority to reject or modify the ALJ's findings of fact and conclusions of law. Pursuant to section 120.57(1)(*l*), Florida Statutes,[1] the Commission may not reject or modify the ALJ's findings of fact unless the Commission "first determines from a review of the entire record, and states with particularity in the order, that the findings of fact were not based upon competent substantial evidence, or that the proceedings on which the findings were based did not comply with essential requirements of law."

If the ALJ's findings of fact are supported by competent substantial evidence, the Commission cannot reject or modify them even to make alternate findings that are also supported by competent substantial evidence. *Kanter Real Estate, LLC v. Dep't of Envtl. Prot.*, 267 So. 3d 483, 487–88 (Fla. 1st DCA 2019), *reh'g denied* (Mar. 19, 2019), *review dismissed sub nom. City of Miramar v. Kanter Real Estate, LLC*, SC19-639, 2019 WL 2428577 (Fla. June 11, 2019), citing *Lantz v. Smith*, 106 So. 3d 518, 521 (Fla. 1st DCA 2013).

Moreover, the Commission may not "reject a finding that is substantially one of fact simply by treating it as a legal conclusion," regardless of whether the finding is labeled a conclusion of law. *Gross v. Dep't of Health*, 819 So. 2d 997, 1005 (Fla. 5th DCA 2002); *Gordon v. State Comm'n on Ethics*, 609 So.2d 125, 127 (Fla. 4th DCA 1992); *Kanter Real Estate*, 267 So. 3d at 487-88, citing *Abrams v. Seminole Cty. Sch. Bd.*, 73 So. 3d 285, 294 (Fla. 5th DCA 2011). Similarly, a finding that is both a factual and legal conclusion cannot be rejected when there is substantial competent evidence to support the factual conclusion, and where the legal conclusion necessarily

[1] All statutory and rule references are to the 2019 versions, unless otherwise indicated. The Transcript of the final hearing was filed on February 24, 2020. Citation to the Transcript herein will be the witness's last name followed by the abbreviation "Tr." followed by the citation to the page.

follows. *Berger v. Dep't of Prof. Reg.*, 653 So. 2d 479, 480 (Fla. 3d DCA 1995); *Strickland v. Florida A&M Univ.*, 799 So. 2d 276, 279 (Fla. 1st DCA 2001); *Dunham v. Highlands County Sch. Bd.*, 652 So. 2d 894, 897 (Fla. 2nd DCA 1995).

It is the sole prerogative of the ALJ to consider the evidence presented, to resolve conflicts in the evidence, to judge the credibility of witnesses, to draw permissible inferences from the evidence, and to reach ultimate findings of fact based on the competent substantial evidence of record. *Ft. Myers Real Estate Holdings, LLC v. Dep't of Bus. & Prof'l Regulation*, 146 So. 3d 1175 (Fla. 1st DCA 2014), citing *Heifetz v. Dep't. of Bus. Reg.*, 475 So. 2d 1277, 1281 (Fla. 1st DCA 1985).

"Competent substantial evidence" is "such relevant evidence as a reasonable mind would accept as adequate to support a conclusion." *De Groot v. Sheffield*, 95 So. 2d 912, 916 (Fla. 1957). The Commission may reject an ALJ's findings of fact only where there is no competent substantial evidence from which the findings can reasonably be inferred. *Heifetz v. Dep't. of Bus. Reg.*, 475 So. 2d 1277, 1281 (Fla. 1st DCA 1985); *Belleau v. Dep't of Environmental Protection*, 695 So.2d 1305, 1306 (Fla. 1st DCA 1997); *Strickland v. Florida A&M Univ.*, 799 So.2d at 278. Absent such an express and detailed finding, the Commission is bound to accept the ALJ's findings of fact. *See Southpointe Pharmacy v. Dep't of Health & Rehab. Serv.*, 596 So. 2d 106, 109 (Fla. 1st DCA 1992).

The Commission is not authorized to substitute its judgment for that of the ALJ by taking a different view of, or placing greater weight on the same evidence, reweighing the evidence, judging the credibility of witnesses, or otherwise interpreting the evidence to fit its desired conclusion. *Prysi v. Dep't of Health*, 823 So. 2d 823, 825 (Fla. 1st DCA 2002); *Strickland*, 799 So.2d at 279; *Schrimsher v. Sch. Bd. of Palm Beach County*, 694 So. 2d 856, 860 (Fla. 4th DCA

1997); *Heifetz*, 475 So.2d at 1281; *Wash & Dry Vending Co. v. Dep't of Bus. Reg.*, 429 So. 2d 790, 792 (Fla. 3rd DCA 1983).

The Commission may reject or modify a conclusion of law over which it has substantive jurisdiction, but must state with particularity its reasons for rejecting or modifying such conclusion of law, and make a finding that its substituted conclusion of law is as or more reasonable than that which was rejected or modified. Section 120.57(1)(*l*), Fla. Stat.; *Prysi*, 823 So. 2d at 825. Rejection or modification of a conclusion of law may not form the basis for rejection or modification of a finding of fact. Section 120.57(1)(*l*), Fla. Stat.

RESPONSE TO DEF EXCEPTIONS

RESPONSE TO DEF EXCEPTION NO. 1.

DEF excepts to Paragraph 110 of the Recommended Order, which is set forth verbatim below:

> 110. DEF failed to demonstrate by a preponderance of the evidence that its actions during Period 1 were prudent. DEF purchased an aftermarket steam turbine from Mitsubishi with the knowledge that it had been manufactured to the specifications of Tenaska with a design point of 420 MW of output. Mr. Swartz's testimony regarding the irrelevance of the 420 MW limitation was unpersuasive in light of the documentation that after the initial blade failure, DEF itself accepted the limitation and worked with Mitsubishi to find a way to increase the output of the turbine to [redacted]

DEF acknowledges that the ALJ set forth the correct legal standard for determining prudence as established by the Florida Supreme Court. *See* DEF Exceptions, footnote 7. DEF nevertheless mistakenly argues that the ALJ applied the incorrect legal standard in determining that DEF failed to demonstrate that it acted prudently during the period leading up to and in restoring the unit to service after the February 2017 forced outage at the Bartow plant. DEF suggests, without basis or explanation, that the ALJ relied on "hindsight" in determining that DEF's actions were imprudent.

As evidenced by the Recommended Order, however, and consistent with the appropriate standard of legal review, the ALJ expressly assessed all evidence presented relating to the conditions and circumstances that were known, or should have been known, by DEF ***at the time DEF made the decision and took action*** to repeatedly and extensively operate the steam turbine ("ST") in excess of 420 MW and when DEF ***failed to take the action*** it should have taken to consult with Mitsubishi.

In Paragraph 109 of the Recommended Order, the ALJ expressly states the legal standard applied in the Recommended Order:

> 109. The legal standard for determining whether replacement power costs are prudent is "what a reasonable utility manager would have done, in light of the conditions and circumstances that were known, or should [have] been known, ***at the time the decision was made.***" *S. Alliance for Clean Energy v. Graham*, 113 So. 3d 742, 750 (Fla. 2013).

(Emphasis added). Contrary to DEF's suggestion, and as evidenced by the entirety of the record, the ALJ thoroughly considered evidence of the conditions and circumstances known, or that should have been known, to DEF ***at the time the decisions were made***. The ALJ found, based on a detailed, systematic review of the competent substantial evidence of record, that DEF knew, or should have known, that its actions (including the failure to act) "***during period 1***" were imprudent.

DEF fails to provide any valid factual or legal basis for DEF's assertion that the ALJ improperly used "hindsight," or "Monday morning quarterbacking," in determining that DEF acted imprudently during Period 1. The determination of "what a reasonable utility manager would have done, in light of the conditions and circumstances that were known, or should have been known, ***at the time the decision was made***" necessarily involves a review of prior actions and contemporaneous materials reflecting the conditions and circumstances that existed at the time the decision in question was made.

DEF does not dispute that the ALJ's findings of fact set forth in Paragraph 110 are supported by competent substantial evidence. Instead, DEF simply recasts its preferred version of the facts, which were duly considered and rejected by the ALJ.

The ALJ's determination that DEF acted imprudently is supported by numerous uncontested findings of fact set forth in the Recommended Order, each of which are supported by competent substantial evidence, including but not limited to:

- The Mitsubishi steam turbine was originally designed for Tenaska Power Equipment, LLC ("Tenaska"), to be used in a 3x1 combined cycle configuration with three M501 Type F combustion turbines connected to the steam turbine with a gross output of 420 MW of electricity. (Recommended Order, ¶ 14) (Polich, Tr. 305, 325, 329; Swartz, Tr. 42, 163, 212, 255; Ex. 80 at 2, 3; Ex. 111).
- The greater weight of the evidence establishes that the Mitsubishi steam turbine was designed to operate at 420 MW of output and that 420 MW was an operational limitation of the turbine. (Recommended Order, ¶ 33) (Polich, Tr. 303, 305, 325, 329, 330; Ex. 80 at 2; Ex. 108 at 2437-2561; Ex. 109 at 12432, 12438; Ex. 116 at 4, 21; Swartz, Tr. 42, 82-83; 127-28, 130-31, 137, 163, 212, 255; Ex. 111; Ex. 80 at 3).
- Mitsubishi concluded that the damage to the blades was caused by [redacted]

[redacted] (Recommended Order, ¶ 37) (Ex 82 at 5; Ex. 73 at 3; Ex. 116 at 4).

- The [DEF RCA] working papers indicate that as late as October 15, 2016, DEF agreed that the [redacted] (Recommended Order, ¶ 69) (Swartz. Tr. 90. 161-162. 82-83; Ex. 115 at 19; Ex. 116 at 4, 21; Ex. 109 at Bates 12432).
- OPC accurately states that the DEF working documents demonstrate that during the RCA process, before and after the Period 5 event, DEF consistently identified excessive steam flow in the LP turbine as one of the "most significant contributing factors" toward blade failure over the history of the steam turbine, [redacted] (Recommended Order, ¶ 71) (Swartz, Tr. 86-88, 112; Ex. 73 at 3; Ex. 115 at 23, 29, 39, 59, 67, 75, 87, 97, 109, 123, 137, 151, and 165; Ex. 73 at 3; Ex. 116 at 4).
- The Energy Information Administration of the U.S. Department of Energy defines "generator nameplate capacity" as the "maximum rated output of a generator, prime mover, or other electric power production equipment under specific conditions designated by the manufacturer." There was no dispute that 420 MW was the

"nameplate capacity" of the Mitsubishi steam turbine. (Recommended Order, ¶ 82) (Swartz. Tr. 224, 209-210; Ex. 111; Ex. 118).

- Given the lack of experience on either side, OPC contends that DEF should have consulted Mitsubishi before purchasing the steam turbine to ask whether Mitsubishi believed it was capable of an output in excess of its nameplate capacity of 420 MW. [redacted] (Recommended Order, ¶ 86) (Polich. Tr. 308-309, 320-321. 365-366; Ex. 109 at 12438; Ex. 108 at 2461; Ex. 104 at 44; Ex. 72; Ex. 80 at 5; Swartz, Tr. 73, 108, 137).
- The evidence was clear that Mitsubishi did not contemplate DEF's operation of the steam turbine beyond the [redacted] The evidence was also clear that

DEF made no effort before the fact to notify Mitsubishi of its intended intensity of operation or to ask Mitsubishi whether it could safely exceed the [redacted] Mr. Swartz was unable to explain away this criticism and thus DEF failed to meet its burden of demonstrating that it prudently operated the Bartow Plant during the times relevant to this proceeding. (Recommended Order, ¶ 102) (Polich, Tr. 308-309, 320-321, 365-366; Ex. 109 at 12438; Ex. 108 at 2461; Ex. 104 at 44; Swartz, Tr. 73, 108, 137; Ex. 72; Ex. 80 at 5).

- DEF purchased an aftermarket steam turbine from Mitsubishi with knowledge that it had been manufactured to the specifications of Tenaska with a design point of 420 MW of output. (Recommended Order, ¶ 110) (Polich, Tr. 305. 325; Swartz, Tr. 212, 255).

Contrary to DEF's suggestion, the ALJ stated and applied the correct legal standard to the evidence of record pertaining to the facts and circumstances that existed ***at the time that DEF made the decision and took action*** to operate the Bartow steam turbine repeatedly and extensively in excess of 420 MW. The ALJ found, based on the competent substantial evidence of record, that the operational limit of the Bartow steam turbine was "420 MW based on the Mitsubishi design point and the expected maximum electrical output," and that DEF's decision and action to operate the ST repeatedly and extensively in excess of 420 MW, based on information that DEF knew, or should have known, was imprudent. The ALJ found, based on competent substantial evidence of record, that DEF should have consulted with Mitsubishi before DEF operated the ST above the design point of 420 MW. (Recommended Order, ¶ 102) (Polich, Tr. 308-309, 320-321, 365-366;

Ex. 109 at 12438; Ex. 108 at 2461; Ex. 104 at 44; Swartz, Tr. 73, 108, 137; Ex. 72; Ex. 80 at 5). The ALJ found that DEF presented no evidence that DEF consulted with Mitsubishi prior to doing so, and further found that DEF's expert "was unable to explain away this criticism." *Ibid.* The ALJ's findings of fact and competent substantial evidence of record support the ALJ's ultimate determination set forth in Paragraph 110 of the Recommended Order that DEF failed to carry its burden of proof to demonstrate that DEF acted prudently during the period in question.

The case cited by DEF, *Fla. Power Corp. v. Public Service Com'n*, 456 So. 2d 451, 452 (Fla. 1984), relating to the application of "hindsight" is inapposite and readily distinguishable on its facts. In *Fla. Power Corp.*, the Florida Supreme Court held that the Commission could not retroactively, i.e., "in hindsight," re-designate "non-safety-related" repair work as "safety-related," and thus the Commission could not retroactively apply the higher standard of care applicable to "safety-related work" when determining whether the work at issue was prudently performed. *See Fla. Power Corp.* 456 So. 2d at 451 ("Our review of the record indicated that the extended repair work involved at the time was not per se safety-related," thus "a safety-related standard" that involved "a very different risk and a much higher standard of care," could not be retroactively applied.); *See also Fla. Power Corp. v. Public Service Com'n*, 424 So. 2d 745, 747 (Fla. 1982) ("Our independent review of the record discloses that the particular task which resulted in the accident was but a small part of the extended repairs to the fuel transfer mechanism. The record further indicates that the repair work, per se, was not safety-related, and this was, in part, why the use of the test weight was not recognized as being safety-related."). In essence, the Supreme Court held that the Commission could not change the standard of care "rules of the game," namely whether a task was or was not "safety-related" at the time it was performed, when the action in

question was later reviewed. Here, nothing supports the notion that any "rules of the game" were changed while the ALJ considered the disputed facts of the case.

DEF goes on to extensively reargue and rehash arguments that DEF previously presented to the ALJ and that the ALJ rejected. DEF improperly urges the Commission to make alternative findings that contradict the findings made by the ALJ, which the Commission may not do. DEF also urges the Commission to make new findings that, upon examination, are not supported by any evidence of record. DEF makes the following assertion on page 3 of its Exceptions:

> Before committing to purchase the ST, DEF contracted with Mitsubishi to assess whether the ST design conditions were compatible with the Bartow Plant's proposed 4x1 combined cycle design configuration. As part of this assessment, DEF informed Mitsubishi that DEF intended to operate the Bartow Plant and the ST in 4x1 configuration with a power factor exceeding [redacted] which would result in the generation of more than 420 MW. T. 42, 135-136, 147-148, 213-215, 234, 258, 278, 356.

A careful review of each of the pages cited by DEF fails to reveal any evidence remotely indicating that Mitsubishi had been informed that DEF intended to operate the ST above 420 MW. DEF presented no evidence at the final hearing to contest Mr. Polich's testimony that DEF did not inform Mitsubishi of its intent to operate the ST above 420 MW, much less that DEF intended to operate it at [redacted] (Polich, Tr. 329-330.)

DEF attempts to re-argue that "Mitsubishi believed the ST was capable of operating above 420 MW [redacted] The ALJ, however, found DEF's argument unpersuasive. See Recommended Order, Paragraphs 111, 112, 113, 114, 118, 119 and 121.

DEF further attempts to re-argue that "[i]n the utility industry, the nameplate rating is not regarded as an 'operating parameter.'" and that "the general standard followed in the industry is to operate steam turbines within operating parameters provided by the original equipment manufacturer while also striving to achieve the most efficiency for utility customers." The ALJ,

based on the entirety of the record, found DEF's arguments "unpersuasive" with respect to the prudence of DEF's decisions and actions during the period leading up to and in restoring the unit to service after the February 2017 forced outage at the Bartow plant.[2]

DEF next reargues that "DEF had appropriate operating parameters in place, and DEF properly followed these parameters," throughout Periods 1-5, and that the ALJ erred by viewing DEF's [redacted] of Mitsubishi's 420 MW operating parameter in Periods 2 - 5 as a concession that it was a "previous limitation." The ALJ, based on competent substantial evidence of record, concluded that DEF's actions after the first blade failures acknowledged and confirmed that the design point and operating limitation of the steam turbine was 420 MW. The competent substantial evidence relied on by the ALJ includes the [redacted] provided by Mitsubishi. (Swartz, Tr. 90, 161-162, 82-83; Ex. 115 at 19; Ex. 116 at 4, 21; Ex. 109 at Bates 12432). As evidenced by the Recommended Order, the then-contemporaneous evidence of the 420 MW design limitation that was available in 2006-2008 and DEF's consistent and ready acknowledgement of that operational limit in 2012 was more persuasive to the ALJ than the testimony and arguments presented by DEF at the final hearing. The ALJ expressly found the testimony of DEF's expert witness on this point "unpersuasive." (Recommended Order, Paragraph 110). It is the sole province of the ALJ to determine and weigh

[2] The ALJ found that the concept of "nameplate" is but one of many indicia of the intended operational limit of the ST and, as set forth in the ALJ's findings of fact, that Mitsubishi clearly informed DEF of the limit of the ST through [redacted] The ALJ further found, based on competent substantial evidence of record, that DEF's operation of the ST for approximately half of the total 21,734 hours at 420 MW or above, with 2,973 of those hours ***above*** 420 MW in Period 1, was not an incidental exceedance of a number on a nameplate label, but instead was a failure to exercise reasonable care in operating the steam turbine in a configuration for which it was not designed. (Recommended Order, ¶ 35) (Swartz, Tr. 285, 137, 127-129, 130-131, 76-77, 82-83, 159-162, 169; Polich, Tr. 302-305, 330, 332; Ex. 115 at 19, 24; Ex. 116 at 4, 21; Ex. 108 at 2437-2561; Ex. 109 at Bates 12432-12439).

the credibility of witness testimony, and the Commission may not substitute its view of the evidence for that of the ALJ.

Finally, DEF suggests that the Commission should reject the ALJ's ultimate determination that DEF acted imprudently in this case, because the ALJ's determination of DEF's imprudence in this case "would also inhibit a utility's ability to maximize output for the benefit of its customers." DEF's assertion lacks merit. The ALJ's determination in this case is based on the evidence of record and is consistent with applicable law. The Recommended Order contains no findings of fact or conclusions of law that would inhibit a utility's ability or incentive to prudently maximize output for the benefit of its customers. The only thing a final order adopting the Recommended Order would inhibit or discourage is imprudent utility power plant operation and management, not prudently optimizing output.

Paragraph 110 of the Recommended Order applies the correct legal standard, is based on factual findings supported by competent substantial evidence and cannot be disturbed. DEF's exception to Paragraph 110 must be DENIED.

RESPONSE TO DEF EXCEPTION NO. 2.

DEF excepts to Paragraph 111 of the Recommended Order, which is set forth verbatim below:

> 111. DEF's RCA concluded that the blade failures were caused by [redacted] This conclusion is belied by the fact that [redacted] Mitsubishi cannot be faulted for [redacted] in a way that would allow an operator to run the turbine consistently beyond its capacity.

This paragraph of the Recommended Order contains factual findings that support the ALJ's ultimate conclusions of law. The Commission may not reject the findings of fact in Paragraph 111

unless there is no competent substantial evidence to support them. Similarly, a finding that is both a factual and a legal conclusion cannot be rejected when there is substantial competent evidence to support the factual conclusion and the legal conclusion necessarily follows. *Berger, 653 So. 2d at 480;* Strickland, 799 So. 2d at 279; *Dunham*, 652 So. 2d at 897.

The ALJ's findings of fact set forth in Paragraph 111 are supported by competent, substantial evidence and cannot be disturbed. (Swartz, Tr. 179; Ex. 82 at 5; Ex. 103 at 55; Ex. 104 at 14; Ex. 115 at 180). The ALJ is solely authorized to weigh and balance the evidence, determine the credibility of witnesses, and draw reasonable inferences from the evidence. *See Heifetz v. Dep't. of Bus. Reg.*, 475 So. 2d at 1281-2. DEF does not suggest any error of law, does not dispute that the findings of fact are supported by competent substantial evidence, and does not contend that the proceedings failed to comply with essential requirements of law. Instead, DEF simply re-argues the evidence of record and makes new arguments. Pursuant to section 120.57(1)(*l*), Florida Statutes, the Commission may not reweigh the evidence, consider "evidence" not of record, nor modify or reject an ALJ's factual finding when the finding is supported by competent substantial evidence of record. This is true even when the record may contain conflicting evidence, and when the Commission may disagree with the ALJ's view of the evidence. As noted by the court in *Heifetz*:

> If, as is often the case, the evidence presented supports two inconsistent findings, it is the hearing officer's role to decide the issue one way or the other. The agency may not reject the hearing officer's finding unless there is no competent, substantial evidence from which the finding could reasonably be inferred. The agency is not authorized to weigh the evidence presented, judge credibility of witnesses, or otherwise interpret the evidence to fit its desired ultimate conclusion.

Finally, in its second Exception, DEF again re-argues the issue of the timing of when the damage occurred in Period 1; however, this issue is not addressed in Paragraph 111 of the Recommended Order. The findings of fact in Paragraph 111 of the Recommended Order are supported by competent, substantial evidence of record and may not be disturbed. (Swartz Tr. 108; 179; Ex. 80 at 6; Ex 82 at 5; Ex. 103 at 55; Ex. 104 at 14; Ex. 115 at 180). DEF's exception to Paragraph 111 must be DENIED.

RESPONSE TO DEF EXCEPTION NO. 3.

DEF excepts to Paragraph 112 of the Recommended Order, which is set forth verbatim below:

112. [redacted]

Paragraph 112 of the Recommended Order contains findings of fact that support the ALJ's conclusions of law. The Commission may not reject the findings of fact unless there is no competent substantial evidence of record to support them. The ALJ's findings of fact in Paragraph 112 are supported by competent substantial evidence of record, including:

- Mitsubishi prepared a root cause assessment, dated September 2017, in which it determined that [redacted] (Swartz, Tr. 100; Ex. 82 at 5-6).
- Mitsubishi concluded that [redacted]

[redacted] (Swartz, Tr. 111-12, 86-88; Ex 82 at 5; Ex. 73 at 3; Ex. 115 at 23, 29, 39, 59, 67, 75, 123, 137, 153, 165, and 179).

DEF does not dispute that the ALJ's findings of fact are supported by competent substantial evidence. DEF nevertheless re-argues its version of the evidence as to the "root cause" of the blade failures, and urges the Commission to find facts that contradict the facts found by the ALJ. The ALJ's findings of fact and conclusions in Paragraph 112 of the Recommended Order are supported by competent substantial evidence of record and cannot be disturbed. DEF's exception to Paragraph 112 must be DENIED.

RESPONSE TO DEF EXCEPTION NO. 4.

DEF excepts to Paragraph 113 of the Recommended Order, which is set forth verbatim below:

> 113. Mr. Polich persuasively argued that it would have been simple prudence for DEF to ask Mitsubishi about the ability of the turbine to operate continuously in excess of 420 MW output before actually operating it at those levels. DEF understood that the blades had been designed for the Tenaska 3x1 configuration and should have at least explored with Mitsubishi the wisdom of operating the steam turbine with steam flows in excess of those anticipated in the original design.

This paragraph of the Recommended Order contains factual findings that support the ALJ's conclusions. The Commission may not reject these findings of fact unless there is no competent substantial evidence to support them. DEF does not dispute that the findings of fact are supported by competent substantial evidence, nor proffer or support a different legal analysis or conclusion in its exception. Instead, DEF rehashes the evidence and urges the Commission to make new findings that contradict the findings made by the ALJ, arguing that its proposed new findings are

"as or more reasonable" than the findings made by the ALJ. Pursuant to 120.57(1)(*l*), Florida Statutes, the Commission may not substitute new findings of fact for those made by the ALJ even if the Commission views the proposed new findings "as or more reasonable" than those made by the ALJ. The legal standard for rejecting or modifying an ALJ's finding of fact is whether the ALJ's finding is supported by competent substantial evidence of record. In Paragraph 113 of the Recommended Order, the ALJ expressly finds the expert testimony of Mr. Polich credible and persuasive, and the testimony presented by DEF unpersuasive, with respect to the issue of whether DEF acted as a reasonable utility manager would have done in light of the conditions and circumstances that were known, or should have been known, at the time the decision was made. As noted above, the credibility of witnesses is wholly a factual determination within the sole province of the ALJ. *Strickland*, 799 So. 2d at 278 ("the weighing of evidence and judging of the credibility of witnesses by the Administrative Law Judge are solely the prerogative of the Administrative Law Judge as finder of fact.").

The ALJ determined, based on the competent, substantial evidence of record, that DEF failed to carry its burden of proof that it acted prudently during the period in question. (Swartz, Tr. 82-83, 116, 127-129, 130-131, 137: Polich, Tr. 308-309, 320-321; Ex. 105 at Bates 6875; Ex. 108 at 2437-2561; Ex. 109 at Bates 12432-12439; and Ex. 116 at 4 and 21).

The ALJ's findings of fact in Paragraph 113 of the Recommended Order are supported by competent substantial evidence of record and cannot be disturbed. DEF's exception to Paragraph 113 must be DENIED.

RESPONSE TO DEF EXCEPTION NO. 5.

DEF excepts to Paragraph 114 of the Recommended Order, which is set forth verbatim below:

> 114. The record evidence demonstrated an [redacted] that vibrations associated with high energy loadings were the primary cause of the L-0 blade failures. DEF failed to satisfy its burden of showing its actions in operating the steam turbine in Period 1 did not cause or contribute significantly to the vibrations that repeatedly damaged the L-0 blades. To the contrary, the preponderance of the evidence pointed to DEF's operation of the steam turbine in Period 1 as the most plausible culprit.

Paragraph 114 of the Recommended Order summarizes the findings of fact that support the ALJ's ultimate determination. The Commission may not reject these factual portions of the paragraph unless there is no competent substantial evidence supporting them. DEF does not dispute that the findings of fact and conclusions in Paragraph 114 of the Recommended Order are supported by competent, substantial evidence, nor does DEF proffer or support a different legal analysis or conclusion in its exception. Instead, DEF simply offers the conclusory statement that it would be "as or more reasonable to conclude that DEF actions did not cause or contribute significantly to the L-0 blade damage that occurred during Periods 1 through 5." The Commission's scope of review is whether the findings of fact are supported by competent substantial evidence of record. The ALJ's findings of fact in Paragraph 114 are supported by competent substantial evidence of record. (Swartz, Tr. 42, 73, 108, 163, 121-122, 126, 127, 132, 137; Polich, Tr. 303-306, 329-330; Ex. 72; Ex. 80 at 2, 3, and 5; Ex. 108 at Bates 2461; Ex. 109 at Bates 12432-12439; Ex. 115 at 23, 29, 39, 59, 67, 75, 123, 137, 153, 165, and 179 and Ex. 116 at 4 and 21).

In its exception DEF asserts that the ALJ's findings of fact and conclusions of law imposed an "impossible standard of proving a negative" on DEF, as the party with the burden of proof. DEF's argument does not fairly reflect the ALJ's findings of fact and conclusions of law. The ALJ

correctly determined, and DEF does not dispute, that the utility carries the burden of proof to demonstrate the prudence of DEF's decisions and actions during the period leading up to and in restoring the unit to service after the February 2017 forced outage at the Bartow plant. The ALJ determined, based on the competent substantial evidence of record that DEF failed to carry its burden of proof to demonstrate that it acted prudently during the period in question. The ALJ found, based on the competent substantial evidence of record that DEF acted imprudently, and further found that DEF failed to rebut the evidence of its imprudence. The Recommended Order reflects that DEF failed to establish a prima facie case that it acted prudently and failed to provide evidence to rebut the persuasive evidence of its imprudence. The ALJ applied the correct legal standards with respect to the burden of proof and the determination of prudence. The ALJ's findings of fact set forth in Paragraph 114 of the Recommended Order are based on competent substantial evidence of record and may not be disturbed. DEF's exception to Paragraph 114 of the Recommended Order must be DENIED.

RESPONSE TO DEF EXCEPTION NO. 6.

DEF excepts to Paragraph 119 of the Recommended Order, which is set forth verbatim below:

> 119. It is speculative to state that the original Period 1 L-0 blades would still be operating today had DEF observed the [redacted] of 420 MW. It is not speculative to state that the events of Periods 2 through 5 were precipitated by DEF's actions during Period 1. It is not possible to state what would have happened from 2012 to 2017 if the excessive loading had not occurred, but it is possible to state that events would not have been the same.

In its exception, DEF re-argues that there was no [redacted] to the ST following Period 1, and urges the Commission to reject the ALJ's finding of fact that "[i]t is not speculative to state that the events of Periods 2 through 5 were precipitated by DEF's actions during Period 1." DEF

asks the Commission to substitute a new finding that "the damage to the L-0 blades that occurred during Periods 2 through 5 was not precipitated by DEF's operation of the ST during Period 1." (DEF Exceptions, p. 9).

The findings and conclusions in Paragraph 119 of the Recommended Order summarize the ALJ's findings of fact in Paragraphs 84 and 89 of the Recommended Order that "[t]here would have been no Periods 2, 3, 4, or 5 but for DEF's actions during Period 1" and rejecting DEF's argument that DEF's operation of the unit at [redacted] bears no relation to the ultimate failure of the ST in Period 5. Indeed, in Paragraph 89 of the Recommended Order, the ALJ finds that:

> DEF ran the unit beyond 420 MW without consulting Mitsubishi. Mr. Polich found it a tribute to the design of the [redacted] 40" L-0 blades that they did not suffer damage sooner than they did. The steam turbine operated from June 2009 until March 2012 before the blade damage was noted. It was impossible to state exactly when the blade damage occurred in Period 1, but Mr. Polich opined that the damage was most likely cumulative.

In footnote 4 of the Recommended Order, the ALJ further finds that:

> DEF made much of the fact that it could not be said precisely when during Period 1 the damage to the blades occurred, pointing out that there was a 50-50 chance that the blades were damaged when the turbine was operating below 420 MW. This argument fails to consider the cumulative wear caused by running the unit in excess of its capacity half of the time. The exact moment the damage occurred is beside the point.

The ALJ's findings of fact are supported by competent substantial evidence of record, including the credible expert testimony of Mr. Polich relating to the cumulative operational effects on the Bartow facility. Moreover, as the finder of fact in a formal administrative proceeding, the ALJ is permitted to draw reasonable inferences from the competent substantial evidence in the record. *Amador v. Sch. Bd. of Monroe County*, 225 So. 3d 853, 858 (Fla. 3d DCA 2017) ("[w]here

reasonable people can differ about the facts, however, an agency is bound by the hearing officer's reasonable inferences based on the conflicting inferences arising from the evidence"), citing *Greseth v. Dep't of Health & Rehab. Servs*, 573 So. 2d 1004, 1006–1007 (Fla. 4th DCA 1991).

The ALJ's findings in Paragraphs 84, 89, and 119 of the Recommended Order are supported by competent substantial evidence of record, including:

- If DEF had operated the steam turbine at the Bartow Unit 4 in accordance with the design output of 420 MW or less, there is no engineering basis to conclude that the original L-0 blades would not still be in operation today. (Polich, Tr. 308-309, 320-321).
- [redacted] (Polich, T. 304-309, 334, 352; Swartz, Tr. 86-88, 112; Ex. 73 at 3; Ex. 115 at 23, 29, 39, 59, 67, 75, 87, 97, 109, 123, 137, 151, and 165; Ex. 73 at 3; Ex. 116 at 4).
- [redacted] (Swartz, T. 108, 179; Ex. 103 at 55; Ex.80 at 6; Ex. 104 at 14; Ex. 115 at 180).
- The installation of the pressure plate and associated de-rate were due to improper operation above 420 megawatts in Period 1. (Polich, Tr. 361).
- A prudent utility manager, from both a warranty and a regulatory perspective, would have requested written verification from

Mitsubishi that the steam turbine could be safely operated above 420 MW of output. (Polich, Tr. 361-362; 304-309).

The ALJ's findings of fact and conclusions in Paragraph 119 are supported by competent substantial evidence of record and the Commission is not free to substitute new or alternative findings urged by DEF. Moreover, DEF had the burden of proof to demonstrate that it acted prudently and that the costs incurred were not the result of DEF's imprudent actions or inactions. To the contrary, DEF failed to carry that burden and prove its actions in operating the plant were prudent and it failed to prove that the damages were the result of prudent operations and thus should be recovered from ratepayers. DEF's exception to Paragraph 119 of the Recommended Order must be DENIED.

RESPONSE TO DEF EXCEPTION NO. 7.

DEF excepts to Paragraph 120 of the Recommended Order, which is set forth verbatim below:

> 120. In his closing argument, counsel for White Springs summarized the equities of the situation very well:
>
> You can drive a four-cylinder Ford Fiesta like a V8 Ferrari, but it's not quite the same thing. At 4,000 RPMs, in second gear, the Ferrari is already doing 60 and it's just warming up. The Ford Fiesta, however, will be moaning and begging you to slow down and shift gears. And that's kind of what we're talking about here.
>
> It's conceded as fact that the root cause of the Bartow low pressure turbine problems is [redacted] caused repeatedly over time. The answer to the question is was this due to the way [DEF] ran the plant or is it due to a [redacted]? Well, the answer is both.
>
> The fact is that [DEF] bought a steam turbine that was already built for a different configuration that was in storage, and then hooked it up to a configuration ... that it knew could produce much more steam than it needed. It had a generator that could produce more megawatts, so the limiting factor was the steam turbine.

> On its own initiative, it decided to push more steam through the steam turbine to get more megawatts until it broke.
>
> * * *
>
> So from our perspective, [DEF] clearly was at fault for pushing excessive steam flow into the turbine in the first place. The repair which has been established ... may or may not work, but the early operation clearly impeded [DEF's] ability to simply claim that Mitsubishi was entirely at fault. And under those circumstances, it's not appropriate to assign the cost to the consumers.

In Paragraph 120 of the Recommended Order, the ALJ expresses agreement with counsel's summation of the "equities of the situation." As discussed in detail in the responses to DEF's Exceptions 1 – 6 above, the ALJ's numerous factual findings supporting the ALJ's ultimate determination that DEF acted imprudently and should be required to bear the resulting replacement power costs are supported by competent substantial evidence. (Polich, Tr. 304-309, 361-362; Swartz, Tr. 86-88, 112; Ex. 73 at 3; Ex. 115 at 23, 29, 39, 59, 67, 75, 87, 97, 109, 123, 137, 151, and 165; Ex. 73 at 3; Ex. 116 at 4).

In its Exception to Paragraph 120 of the Recommended Order, DEF does not dispute that the ALJ's findings of fact and ultimate determination are supported by competent substantial evidence. Instead, DEF offers a conclusory argument and improperly urges the Commission to reject the ALJ's findings of fact and to substitute contradictory findings. As set forth in the responses to Exceptions 1 through 6 above, the ALJ's findings that DEF acted imprudently and determination that DEF should be required to bear the resulting replacement power costs are supported by competent substantial evidence of record and are consistent with applicable law. The Commission is not free to reject the ALJ's finding that DEF acted imprudently and to thereby modify the ALJ's ultimate determination that the costs of the forced outage should be borne by DEF. DEF's exception to Paragraph 120 is without merit and must be DENIED.

RESPONSE TO DEF EXCEPTION NO. 8.

DEF excepts to Paragraph 121 of the Recommended Order, which is set forth verbatim below:

> 121. The greater weight of the evidence supports the conclusion that DEF did not exercise reasonable care in operating the steam turbine in a configuration for which it was not designed and under circumstances which DEF knew, or should have known, that it should have proceeded with caution, seeking the cooperation of Mitsubishi to devise a means to operate the steam turbine above 420 MW.

Paragraph 121 of the Recommended Order summarizes the ALJ's numerous findings relating to whether DEF acted imprudently. As reflected throughout the Recommended Order, and set forth in detail in the responses to Exceptions 1 - 6 above, the ALJ's ultimate determination that DEF did not exercise reasonable care in operating the steam turbine in a configuration for which it was not designed, is supported by competent substantial evidence. The Commission is not free to reject or modify findings of facts, or conclusions of law that logically flow from such findings, when the findings are supported by competent substantial evidence of record. DEF's exception to Paragraph 121 is without merit and should be DENIED.

RESPONSE TO DEF EXCEPTION NO. 9.

DEF excepts to Paragraph 122 of the Recommended Order, which is set forth verbatim below:

> 122. Given DEF's failure to meet its burden, a refund of replacement power costs is warranted. At least $11.1 million in replacement power was required during the Period 5 outage. This amount should be refunded to DEF's customers.

Paragraph 122 of the Recommended Order summarizes the ALJ's numerous findings relating to whether DEF acted imprudently, and should be required to bear the resulting replacement power costs. As reflected throughout the Recommended Order, and set forth in detail in the responses to

Exceptions 1 - 6 above, the ALJ's ultimate determination that DEF did not exercise reasonable care in operating the steam turbine in a configuration for which it was not designed, and therefore should be required to bear the resulting replacement power costs, is supported by competent substantial evidence of record. Because the ALJ's findings of fact are supported by competent substantial evidence of record and the ALJ has applied the correct law to the facts, DEF's exception is without merit and must be DENIED.

RESPONSE TO DEF EXCEPTION NO. 10.

DEF excepts to Paragraph 123 of the Recommended Order, which is set forth verbatim below:

> 123. DEF failed to carry its burden to show that the Period 5 blade damage and the required replacement power costs were not consequences of DEF's imprudent operation of the steam turbine in Period 1.

In its exception to Paragraph 123 of the Recommended Order, DEF does not dispute that the ALJ's conclusion in Paragraph 123 is supported by competent, substantial evidence and is consistent with applicable law. Instead, DEF improperly offers the conclusory argument that the Commission should reject the ALJ's findings, re-weigh the evidence, and substitute new and directly contrary findings that are favorable to DEF. As set forth in detail in the responses to DEF's Exceptions 1 - 6 above, the ALJ's findings of fact are supported by competent substantial evidence of record and the ALJ applied the correct legal standard to the evidence of record. DEF's exception is without merit and must be DENIED.

RESPONSE TO DEF EXCEPTION NO. 11.

DEF excepts to Paragraph 124 of the Recommended Order, which is set forth verbatim below:

> 124. The de-rating of the steam turbine that required the purchase of replacement power for the 40 MW loss caused by installation of the pressure plate was a consequence of DEF's failure to prudently operate the steam turbine during Period 1. Because it was ultimately responsible for the de-rating, DEF should refund replacement costs incurred from the point the steam turbine came back online in May 2017 until the start of the planned fall 2019 outage that allowed the replacement of the pressure plate with the [redacted] in December 2019. Based on the record evidence, the amount to be refunded due to the de-rating is $5,016,782.

The fundamental premise of DEF's exception to Paragraph 124 of the Recommended Order is DEF's conclusory re-argument that "DEF proved by a preponderance of the evidence that its operation of the ST during Period 1 was prudent." The ALJ found, based on the competent substantial evidence of record, that DEF's operation of the ST during Period 1 was ***not*** prudent.

DEF further excepts to the ALJ's conclusion that DEF should be required to refund replacement power costs related to the installation of the pressure plate. As set forth in detail in the Recommended Order, and in the responses to DEF's Exceptions 1 - 6 above, the ALJ's findings are supported by competent substantial evidence. The ALJ duly considered DEF's imprudent destruction of a portion of the full capability of the ST that required installation of the pressure plate. (Polich, Tr. 361). The basis for the ALJ's finding that ratepayers should be refunded replacement power costs is DEF's imprudence in operating the Bartow unit. The pressure plate bandage stopped the bleeding, resulting in a 40 MW de-rated output, but did not immunize DEF from the effects of its underlying imprudence.

Notably, DEF does not except to the ALJ's related findings and conclusions in Paragraph 108 of the Recommended Order, in which the ALJ sets forth DEF's burden of proof as it relates to any replacement power costs arising from installation of the pressure plate:

> 108. This is a de novo proceeding. § 120.57(1)(k), Fla. Stat. Petitioner, DEF, has the burden of proving, by a preponderance of the evidence, that it acted prudently in its actions and decisions leading up to and in restoring the unit to service after the February 2017 forced outage at the Bartow Plant. Additionally, DEF must prove by a preponderance of the evidence that no adjustment to replacement power costs should be made to account for the fact that after the installation of a pressure plate in March 2017, the Bartow Plant could no longer produce its rated nameplate capacity of 420 MW. *Dep't of Transp. v. J.W.C. Co.*, 396 So. 2d 778, 788 (Fla. 1st DCA 1981); § 120.57(1)(j), Fla. Stat.

DEF had the burden of proof to show that it acted prudently and that the costs incurred were not the result of DEF's imprudent actions. It did not carry that burden. To the contrary, DEF failed to prove its actions in operating the plant were prudent, and further failed to prove that the damages resulting from the de-rate were the result of prudent operations and thus should be recovered from ratepayers. Therefore, DEF should be required to refund the amounts determined in the Recommended Order. DEF's Exception to Paragraph 124 of the Recommended Order should be DENIED.

RESPONSE TO DEF EXCEPTION NO. 12.

DEF excepts to Paragraph 125 of the Recommended Order, which is set forth verbatim below:

> 125. The total amount to be refunded to customers as a result of the imprudence of DEF's operation of the steam turbine in Period 1 is $16,116,782, without interest.

DEF's exception to Paragraph 125 of the Recommended Order is a conclusory restatement of DEF's re-argument that DEF "operated the ST prudently at all times relevant to the replacement

power costs and is, therefore, not required to refund any amount to its customers." As set forth in detail in the Recommended Order and in the responses to DEF's Exceptions 1 - 6 above, the ALJ found, based on the competent substantial evidence of record, that DEF failed to carry its burden of proof to demonstrate that DEF acted prudently during Period 1 and that no adjustment to replacement power costs should be made to account for the fact that, after the installation of a pressure plate in March 2017, the Bartow Plant could no longer produce its rated nameplate capacity of 420 MW. DEF does not contend that the finding of fact and conclusion set forth in Paragraph 125 of the Recommended Order is not supported by competent substantial evidence, but instead urges the Commission to re-weigh the evidence and substitute a new conclusion without even proffering an alternative legal analysis, which the Commission may not do.

CONCLUSION

The Commission referred this matter to the Division of Administrative Hearings to conduct a formal evidentiary hearing on two questions of disputed fact. The ALJ conducted the formal evidentiary hearing, heard and reviewed extensive testimony of expert witnesses, reviewed voluminous documentary evidence, made numerous findings of fact that are supported by competent substantial evidence, and applied the correct legal standard to determine that DEF did not meet its burden of proof to show that that it acted prudently in operating its Bartow Unit 4 plant and in restoring the unit to service after the February 2017 forced outage; and that DEF therefore may not recover, and thus should refund, $16,116,782 to its customers for replacement power costs resulting from the steam turbine outages from April 2017 through September 2019. DEF's exceptions to the Recommended Order are without merit and should be denied, and the Commission should adopt the Recommended Order in full as the Final Order of the Commission.

DATED THIS 21st day of May 2020.

RESPECTFULLY SUBMITTED,

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CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished to the following parties as indicated below, on this 21st day of May 2020.

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