Davison Van Cleve PC

Attorneys at Law

TEL (503) 241-7242 • FAX (503) 241-8160 • jog@dvclaw.com 1750 SW Harbor Way, Suite 450 Portland, OR 97201

September 2, 2020

Via Electronic Filing

Public Utility Commission of Oregon Attn: Filing Center 201 High St. SE, Suite 100 Salem OR 97301

Re: In the Matter of PACIFICORP, dba PACIFIC POWER

Request for a General Rate Revision.

Docket No. UE 374

Dear Filing Center:

Please find enclosed the proposed Cross-Examination Exhibits of the Alliance of Western Energy Consumers (AWEC/700-708) in the above-referenced docket.

Please note that AWEC's cross-exam exhibits contain Protected Information that is being handled in accordance with Order No. 20-040. The confidential versions of AWEC's cross-exhibits have been encrypted with 7-zip software and are being transmitted electronically to the Commission, per Order No. 20-088.

Thank you for your assistance. If you have any questions, please do not hesitate to call.

Sincerely,

/s/ Jesse O. Gorsuch Jesse O. Gorsuch

Enclosures

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that I have this day served the **Confidential Cross-Examination Exhibits of the Alliance of Western Energy Consumers** upon the parties shown below by sharing copies by electronic mail, per Order No. 20-088.

Dated this 2nd day of September, 2020.

Sincerely,

/s/ Jesse O. Gorsuch
Jesse O. Gorsuch

CITIZENS' UTILITY BOARD OF OREGON

Robert Jenks (C) (HC) Michael Goetz (C) (HC) 610 SW Broadway, Suite 400 Portland, OR 97205 bob@oregoncub.org mike@oregoncub.org

PACIFICORP

Etta Lockey (C) (HC)
Matthew McVee (C) (HC)
825 NE Multnomah Street
Suite 2000
Portland, OR 97232
etta.lockey@pacificorp.com
matthew.mcvee@pacificorp.com

CHARGEPOINT

Scott Dunbar (C) (HC) Keyes Fox & Wiedman LLP 1580 Lincoln St., Suite 880 Denver, CO 80203 sdunbar@kflaw.com

CHARGEPOINT

Steve Elzinga (C) 693 Chemeketa St. NE Salem, OR 97301 steve@chermlaw.com

OPUC STAFF - DEPARTMENT OF JUSTICE

Sommer Moser (C) PUC Staff – Dept. of Justice Business Activities Section 1162 Court St. NE Salem, OR 97301-4096 sommer.moser@doj.state.or.us

OPUC STAFF

Marianne Gardener (C)
OPUC
P.O. BOX 1088
SALEM, OR 97308-1088
marianne.gardner@state.or.us

CALPINE ENERGY

Gregory M. Adams (C) Richardson Adams, PLLC P.O. Box 7218 Boise, ID 83702 greg@richardsonadams.com

CALPINE ENERGY

Kevin Higgins (C)
Energy Strategies LLC
215 State St., Suite 200
Salt Lake City, UT 84111-2322
khiggins@energystrat.com

CHARGEPOINT

alexandra.leumer@chargepont.com (C)

KWUA

Paul Simmons (C) (HC) Crystal Rivera (C) (HC) Somach Simmons & Dunn, PC 500 Capitol Mall, Suite 1000 Sacramento, CA 95814 psimmons@somachlaw.com crivera@somachlaw.com

KWUA

Lloyd C. Reed, President (C) (HC) Lloyd C. Reed d/b/a Reed Consulting 10025 Heatherwood Lane Highlands Ranch, CO 80126 Telephone: 303.279.9508 Lloyd.reed@lloydreedconsulting.com

OFBF

Paul Simmons (C) (HC) Somach Simmons & Dunn, PC 500 Capitol Mall, Suite 1000 Sacramento, CA 95814 psimmons@somachlaw.com

SIERRA CLUB

Gloria Smith (C) (HC) Ana Boyd (C) (HC) Sierra Club Law Program 2101 Webster St., Suite 1300 Oakland, CA 94612 gloria.smith@sierraclub.org ana.boyd@sierraclub.org

SIERRA CLUB

Christopher Bzdok (C) (HC) Olson Bzdok & Howard 420 East Front St. Traverse City, MI 49686 chris@envlaw.com

SBUA

William Steele (C)
Bill Steele and Associates, LLC
P.O. Box 631151
Highlands Ranch, CO 80164
wa.steele@hotmail.com

SBUA

Diane Henkels (C) Small Business Utility Advocates 621 SW Morrison St., STE 1025 Portland, OR 97205 diane@utilityadvocates.org

TESLA

Kevin Auerbacher (C) (HC) Tesla, Inc. 601 13th St. NW, 9th Floor North Washington, DC 20005 kauerbacher@tesla.com

TESLA

Bill Ehrlich (C) (HC) 3500 Deer Creek Rd. Palo Alto, CA 94304 wehrlich@tesla.com

TESLA

Francesca Wahl (C) (HC) 6800 Dumbarton Circle Fremont, CA 94555 fwahl@tesla.com

VITESSE

Liz Ferrell (C) Facebook, Inc. 1 Hacker Way Menlo Park, CA 94205 eferrell@fb.com

VITESSE

Irion Sanger (C) Sanger Law PC 1041 SE 58th Place Portland, OR 97215 irion@sanger-law.com

TESLA

John Dunbar (C) (HC) Dunbar Law LLC 621 SW Morrison St., Suite 1025 Portland, OR 97205 jdunbar@dunbarlawllc.com

VITESSE

R. Bryce Dalley (C) Facebook, Inc. 2400 S. Bertsinger Rd. Ridgefield, WA 98642 rbd@fb.com

WALMART

Vicki Baldwin (C) Parsons Behle & Latimer 201 S. Main St., Suite 1800 Salt Lake City, UT 84111 vbaldwin@parsonsbehle.com

WALMART

Steve Chriss (C) Wal-Mart Stores, Inc. 2001 SE 10th St. Bentonville, AR 72716 stephen.chriss@wal-mart.com

FRED MEYER

Justin Bieber (C)
Fred Meyer/Energy Strategies
215 S. State St., Suite 200
Salt Lake City, UT 84111
jbieber@energystrat.com

FRED MEYER

Kurt Boehm (C) Jody Kyler Cohn (C) Boehm, Kurtz & Lowry 36 E. Seventh St., Suite 1510 Cincinnati, OH 45202 jkylercohn@bkllawfirm.com

BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

UE 374

In the Matter of)
) CROSS-EXAMINATION EXHIBITS OF
PACIFICORP, dba PACIFIC POWER,) THE ALLIANCE OF WESTERN
) ENERGY CONSUMERS
Request for a general rate revision.)
)

Pursuant to Administrative Law Judge's ("ALJ") August 31, 2020 Memorandum, the Alliance of Western Energy Consumers ("AWEC") submits its cross-examination exhibits for the hearing scheduled for September 9 and 10, 2020, in the above-referenced Docket.

AWEC understands that Commission Staff will stipulate to AWEC/706 and AWEC/707; thus, AWEC has no cross examination for Staff witness Soldavini. Additionally, AWEC understands that PacifiCorp will Stipulate to Exhibit AWEC/705; thus, AWEC has no cross examination for PacifiCorp witness Ralston.

Cross-Examination <u>Exhibit</u>	<u>Description</u>
Confidential AWEC/700	Confidential PacifiCorp Response to AWEC Data Request No. 57, plus attachments
AWEC/701	PacifiCorp Response to AWEC Data Request No. 123
AWEC/702	PacifiCorp Response to AWEC Data Request No. 157
AWEC/703	PacifiCorp Response to AWEC Data Request No. 158

PAGE 1 – CROSS-EXAMINATION EXHIBITS OF AWEC

Cross-Examination Exhibit	<u>Description</u>
AWEC/704	PacifiCorp Response to AWEC Data Request No. 159
Confidential AWEC/705	Confidential PacifiCorp Response to AWEC Data Request No. 160, plus attachments AWEC 160-1, AWEC 160-2, AWEC 160-4, and AWEC 160-5
Confidential AWEC/706	Confidential OPUC Response to AWEC Data Request No. 1
Confidential AWEC/707	Confidential OPUC Response to AWEC Data Request No. 2
AWEC/708	New York Times Article Regarding Interest Rates (Aug. 27, 2020)

Dated this 2nd day of September, 2020.

Respectfully submitted,

DAVISON VAN CLEVE, P.C.

/s/ Tyler C. Pepple
Tyler C. Pepple
1750 S.W. Harbor Way, Suite 450
Portland, Oregon 97204
(503) 241-7242 phone
tcp@dvclaw.com
Of Attorneys for the Alliance of Western Energy
Consumers

UE 374/PacifiCorp May 13, 2020 AWEC Data Request 0057

AWEC Data Request 0057

Please provide all assumed values for costs and quantities for each input and calculation underlying the dollars reported in the Kiewit report. Please include all underlying spreadsheets with formulae intact. Please include all externally referenced spreadsheets.

Response to AWEC Data Request 0057

Please refer to Confidential Attachment AWEC 0057. Assumptions used in preparing the report are described in the report prepared by Kiewit.

Confidential information is designated as Protected Information under the protective order in this proceeding and may only be disclosed to qualified persons as defined in that order.

Pages 2 - 35 of Cross-Exhibit AWEC/700 contain Protected Information and have been redacted in their entirety.

UE 374/PacifiCorp June 3, 2020 AWEC Data Request 0123

AWEC Data Request 0123

Referring to PacifiCorp's response to AWEC Data Request 0057, please confirm that PacifiCorp does not have work papers in its possession supporting the costs identified in the Kiewit report.

Response to AWEC Data Request 0123

PacifiCorp does not have possession or control of work papers prepared by Kiewit Engineering Group or its subcontractors supporting the cost estimates identified in the report submitted by Kiewit. The scope of work for the study did not include work papers as a deliverable. PacifiCorp has not received work papers supporting the cost estimates from Kiewit.

UE 374/PacifiCorp August 25, 2020 AWEC Data Request 0157

AWEC Data Request 0157

Please confirm the following with respect to Ms. Bulkley's updated constant growth DCF analyses presented in her surrebuttal testimony. If any are not unequivocally confirmed, please explain any disagreement:

- a. The median ROE of Ms. Bulkley's 30-day constant growth DCF analysis, accounting for all results, is 8.92%.
- b. The median ROE of Ms. Bulkley's 90-day constant growth DCF analysis, accounting for all results, is 8.97%.
- c. The median ROE of Ms. Bulkley's 180-day constant growth DCF analysis, accounting for all results, is 8.77%.

Response to AWEC Data Request 0157

Ms. Bulkley can confirm that the median results of the updated constant growth discounted cash flow (DCF) analyses for the 30-, 90- and 180-day average stock prices are those shown in the data request. However, this does not address the concerns that Ms. Bulkley has with the DCF models under current market conditions, as discussed on pages 25, 29-33, 36, 61, and 80-82 of her reply testimony, as well as in her direct testimony. Further, please also see page 74 of Ms. Bulkley's reply testimony regarding her concern with using the median results of the DCF analysis rather than removing low outliers for individual companies.

UE 374/PacifiCorp August 25, 2020 AWEC Data Request 0158

AWEC Data Request 0158

Please confirm the following with respect to Ms. Bulkley's updated multi-stage DCF analyses presented in her surrebuttal testimony, using a maximum first-stage growth rate. If any are not unequivocally confirmed, please explain any disagreement:

- a. If Ms. Bulkley had used a 4.0% long-term growth rate as her third-stage growth rate, as recommended by Mr. Gorman in his Reply Testimony, her results would be: (i) 8.56% for her 30-day multi-stage DCF; (ii) 8.54% for her 90-day multi-stage DCF; and (iii) 8.17% for her 180-day multi-stage DCF.
- b. If Ms. Bulkley had used a 4.78% long-term growth rate as her third-stage growth rate (i.e., the average of Mr. Gorman's 4.0% long-term growth rate and Ms. Bulkley's 5.56% long-term growth rate), her results would be: (a) 9.17% for her 30-day multi-stage DCF; (b) 9.14% for her 90-day multi-stage DCF; and 8.79% for her 180-day multi-stage DCF.

Response to AWEC Data Request 0158

Ms. Bulkley can confirm that the median results of the updated constant growth discounted cash flow (DCF) analyses for the 30-, 90- and 180-day average stock prices are those shown in the data request. However, this does not address the concerns that Ms. Bulkley has with the DCF models under current market conditions, as discussed on pages 25, 29-33, 36, 61, and 80-82 of her reply testimony, as well as in her direct testimony. Further, please also see pages 52-54 and pages 76-78 of Ms. Bulkley's reply testimony regarding her concerns with the long-term gross domestic product growth rates used by Staff and Mr. Gorman in the Multi-Stage DCF model.

UE 374/PacifiCorp August 28, 2020 AWEC Data Request 0159

AWEC Data Request 0159

Please refer to PAC/4400, McCoy/24:9-18 and AWEC/500, Kaufman/18.

- a. Does PacifiCorp agree that the costs associated with Cholla Unit 4 that PacifiCorp proposes buy down with TCJA benefits include an estimate of approximately \$35 million in future decommissioning costs? If not, please identify how much, if any, future decommissioning costs are included in the amount PacifiCorp proposes to offset with TCJA benefits.
- b. Is it PacifiCorp's testimony at the referenced cite that the Commission will have the opportunity to review the prudence of <u>all</u> decommissioning costs associated with Cholla Unit 4, including those offset with TCJA benefits, or just the amount that represents the "difference between the Company's estimate and actual costs," if any? If PacifiCorp's answer is that the Commission will have the opportunity to review all decommissioning costs, please identify the proceeding in which PacifiCorp expects such a review would occur.
- c. If actual decommissioning costs and other future estimated costs, such as liquidated damages costs, that are proposed to be offset with TCJA benefits are less than the estimated costs, will PacifiCorp refund the difference to customers? If yes, how? If no, why not?

Response to AWEC Data Request 0159

- a. No. As stated in the testimonies of Ms. Etta Lockey and Ms. Shelley E. McCoy, the Company is proposing to use \$64.5 million of the Tax Cuts and Jobs Act (TCJA) benefits to buy down *Oregon's share* of unrecovered balances and closure costs associated with the retirement of Cholla Unit 4. As shown in Exhibit PAC/3106, this includes an estimated \$35.0 million, *total company*, of decommissioning costs. Further as stated in PAC/4400, McCoy/26, Oregon's allocated share of decommissioning costs for Cholla Unit 4 have been included in the Oregon depreciation rates for the plant. The estimated one-third of Oregon's allocation of these costs that have already been collected through depreciation rates is reflected in the accumulated depreciation balance for Cholla Unit 4. PacifiCorp is proposing to use the TCJA benefits to buy down the approximately two-thirds remaining decommissioning costs—approximately \$6.3 million—not already collected through depreciation rates
- b. As with any cost requested for recovery, the Commission will have the opportunity to review the actual decommissioning costs of Cholla Unit 4 once the decommissioning is complete. Similar to the treatment of the excess

Despite PacifiCorp's diligent efforts, certain information protected from disclosure by the attorney-client privilege or other applicable privileges or law may have been included in its responses to these data requests. PacifiCorp did not intend to waive any applicable privileges or rights by the inadvertent disclosure of protected information, and PacifiCorp reserves its right to request the return or destruction of any privileged or protected materials that may have been inadvertently disclosed. Please inform PacifiCorp immediately if you become aware of any inadvertently disclosed information.

UE 374/PacifiCorp August 28, 2020 AWEC Data Request 0159

> Carbon decommissioning reserve in this rate case, the Company will include the balance of the Cholla Unit 4 decommissioning reserve for final disposition in a future rate proceeding after completion of the unit's decommissioning. Actual decommissioning costs could be reviewed in that same proceeding.

c. Final balances and costs that are known prior to the full return of the remaining TCJA benefits, will be trued-up by adjusting the remaining TCJA balance and returned to customers through the Federal Tax Act Adjustment, Schedule 195. The only cost that won't be finalized for true-up through this schedule is decommissioning. As described in subpart b, the true-up of decommissioning costs will be addressed in a future rate proceeding following the decommissioning of Cholla Unit 4.

UE 374/PacifiCorp August 28, 2020 AWEC Data Request 0160

AWEC Data Request 0160

Please refer to PAC/4100, Ralson/19.

- (a) Please provide the MSHA notice disapproving PacifiCorp's bulkhead application in May 2015.
- (b) Please provide any information received from the MSHA in the August-September 2015 time frame indicating that it was declining to consider PacifiCorp's revised application due to the Gold King dam breach.
- (c) Please provide the notice from MSHA in December 2015 stating that they lack jurisdictional authority over the Deer Creek Mine closure.
- (d) Please provide the April 2016 notice from MSHA and DOGM stating that inmine bulkheads would not be approved.

Response to AWEC Data Request 0160

The Company assumes that the reference to "PAC/4100, Ralson/19" is intended to be a reference to the Surrebuttal Testimony of Dana M. Ralston, PAC/4100, Ralston/19.

- (a) Please refer to Confidential Attachment AWEC 0160-1.
- (b) Please refer to Confidential Attachment AWEC 0160-2 and Confidential Attachment AWEC 0160-3.
- (c) Please refer to Confidential Attachment AWEC 0160-4.
- (d) Please refer to Confidential Attachment AWEC 0160-5.

Confidential information is designated as Protected Information under the protective order in this proceeding and may only be disclosed to qualified persons as defined in that order.



UE 374 – OPUC Response to AWEC's Confidential Data Request Page 1

OREGON PUBLIC UTILITY COMMISSION

Issued: August 11, 2020 - Response Due By: August 18, 2020

TO: AWEC 1750 SW HARBOR WAY STE 450

FROM: Sabrinna Soldavini

PORTLAND, OR 97201

Senior Regulatory Analyst

AWEC Data Request No 01:

- 01. Referring to Staff/2300, Soldavini/77:14-18, Staff states that "
- a. Does Staff agree that this line item represents the cost (or avoided cost) of converting Hunter 1 to gas? If Staff does not agree, please explain what Staff understands to be the purpose of this line item.
- b. Does Staff agree that the (\$562) million benefit from this line item in PacifiCorp's analysis represents the benefit of avoiding the cost of converting Hunter 1 to gas because the environmental upgrades at Hunter would allow PacifiCorp to run this unit on coal beyond the planning horizon? If Staff does not agree, please explain what Staff understands this (\$562) million benefit to represent.
- c. Does Staff agree that, if Hunter 1 were retired in 2029 as in AWEC's analysis, a new resource would need to replace this lost capacity? If Staff does not agree, please explain why.
- d. If Staff agrees that a new resource would need to replace Hunter 1 if it were retired in 2029, does Staff agree that the cost or benefit of the "New Resource Capital/Run rate" line item relative to PacifiCorp's analysis would be approximately \$0, as reflected in AWEC's analysis? If Staff does not agree that the cost or benefit would be approximately \$0, does Staff believe that any benefit reasonably attributable to this line item would equal or exceed \$553 million (the net cost to customers of the environmental upgrades to Hunter 1 with a 2029 retirement date identified in AWEC's analysis)?
- e. Referring to Figure 7 in AWEC/300, Kaufman/35, would Staff's responses to any of the above data requests change if applied to the analysis in this figure with respect to the Bridger SCRs? If so, please identify which responses would change and why.

UE 374 – OPUC Response to AWEC's Confidential Data Request

Page 2

OPUC Response No 01:

- a. Staff agrees that a reasonable interpretation of the benefit associated with this line item is the avoided cost of converting Hunter 1 to gas, relative to the cost of environmental upgrades at Hunter 1.
- b. See Staff's response to AWEC Data Request 1a for Staff's understanding of this benefit.
 - Staff understands this question to be asking if it agrees that the avoided cost benefit is derived from the ability to push the investment in a new resource outside the planning horizon by not using a 2029 depreciable life. Generally, Staff does agree that using a retirement date outside the planning horizon allows the costs associated with any replacement resources to be pushed outside of the planning horizon, meaning that any replacement resource costs necessary under a 2029 retirement scenario would not be captured.
- c. Staff has not conducted any additional analysis on the Company's 2029 capacity needs as they relate to the 2013 IRP and AWEC's analysis. However, Staff generally agrees that when a large resource is retired, it is reasonable to assume that new resources will likely be needed to replace the lost capacity if load and market forecasts have not materially changed. Therefore, Staff agrees that if Hunter 1 were retired in 2029, a new resource could be needed to replace the lost capacity of Hunter 1.
- d. Without conducting any additional analysis, Staff cannot agree that the benefit would necessarily be "approximately 0"; however, Staff does agree that the costs would be significant, and that it is reasonable to assume any benefit would be significantly lower than \$553 million.
- e. No.

UE 374 – OPUC Response to AWEC's Confidential Data Request Page 1

OREGON PUBLIC UTILITY COMMISSION

Issued: August 11, 2020 - Response Due By: August 18, 2020

TO: AWEC 1750 SW HARBOR WAY STE 450 PORTLAND, OR 97201

FROM: Sabrinna Soldavini

Senior Regulatory Analyst

AWEC Data Request No 02:

Referring to the line item "New Resource Capital/Run Rate" table at Staff/2300, Soldavini/78, is it Staff's position that a new resource constructed in 2029 would be of the incremental cost of converting Hunter 1 to gas in 2015? If so, please explain the basis for this assumption. If not, please explain why it is appropriate to include a benefit in this line item for a 2029 closure of of the benefit in PacifiCorp's analysis.

OPUC Response No 02:

No. After review, and based on Staff's response to AWEC Data Request No. 01, Staff agrees that applying AWEC's proposed adjustment ratio to this line item is not representative of the cost of converting Hunter to gas in 2015. Staff does not believe that the cost of acquiring 418 MW of capacity (the nameplate capacity of Hunter Unit 1) in 2029 would be only of the incremental cost of converting Hunter 1 to gas in 2015.

However, Staff maintains the argument at Staff/2300, Soldavini/78 that this analysis is not necessarily representative of what might happen if PacifiCorp used a 2029 retirement date for Hunter Unit 1 in its 2013 IRP analysis.

The New Hork Times

https://nyti.ms/31xk7MS

Fed Chair Sets Stage for Longer Periods of Lower Rates

Jerome H. Powell said the central bank would focus its efforts on fostering a strong labor market while tolerating higher inflation.



By Jeanna Smialek

Aug. 27, 2020

Jerome H. Powell, the chair of the Federal Reserve, announced a major shift in how the central bank guides the economy, signaling it will make job growth pre-eminent and will not raise interest rates to guard against coming inflation just because the unemployment rate is low.

In emphasizing the importance of a strong labor market and saying the Fed will tolerate slightly faster price gains, Mr. Powell and his colleagues laid the groundwork for years of low interest rates. That could translate into long periods of cheap mortgages and business loans that foster strong demand and a solid job market.

The changes, which Mr. Powell detailed at the Kansas City Fed's annual Jackson Hole policy symposium, follow a year-and-a-half long review of the central bank's monetary policy strategy. In conjunction with his remarks, the Fed released an outline of its long-run policy plan.

"Our revised statement emphasizes that maximum employment is a broad-based and inclusive goal," Mr. Powell said in the remarks. "This change reflects our appreciation for the benefits of a strong labor market, particularly for many in low- and moderate-income communities."

Market reaction to Mr. Powell's announcement was mixed. Investors had already penciled in years of rock-bottom interest rates and analysts will be watching for more concrete rate guidance at the Fed's upcoming meetings.

Still, Mr. Powell's announcement could mark a defining moment in his tenure as chair, which began in early 2018 in the midst of the longest economic expansion on record and has run straight into the sharpest downturn since the Great Depression. The Fed raised rates nine

times between 2015 and late 2018, with four of those increases under Mr. Powell's watch, as it tried to guard against inflation. Price increases instead stagnated, making the Fed's moves seem like overkill and helping to inspire and inform the policy review.

The central bank is facing major long run challenges as price gains prove tepid and as interest rates have slipped lower across advanced economies including the United States, leaving Fed officials with less room to cut borrowing costs and coax higher growth following recessions. Those slow-burn problems are what prompted Mr. Powell and his colleagues to revamp their policy framework. At the same time, the coronavirus pandemic has created a significant short-run threat, shuttering businesses and costing millions of people their jobs.

Mr. Powell's announcement codifies a critical change in how the central bank tries to achieve its twin goals of maximum employment and stable inflation — one that could inform how the Fed sets monetary policy in the wake of the pandemic-induced recession.

The Fed had long raised rates as joblessness fell to avoid an economic overheating that might result in breakaway inflation — the boogeyman that has haunted monetary policy ever since price gains hit double-digit levels in the 1970s. But the Fed's updated framework recognizes that too low inflation is now the problem, rather than too high.

"It seems like a pretty subtle shift to most normal human beings," said Janet L. Yellen, the former Fed Chair. But "most of the Fed's history has revolved around keeping inflation under control. This really does reflect a decisive recognition that we're in a very different environment."

[Read more about how the Fed's view on inflation has been shifting.]

The Fed's revised statement says that its policies will be informed by "shortfalls" of employment from its maximum level, rather than by "deviations" — suggesting that the central bank is no longer planning to raise rates to cool off the economy simply because unemployment has dipped to low levels.

The central bank is also formally shifting its inflation approach, aiming to average 2 percent inflation over time, rather than as an absolute goal. In doing so, the Fed is trying to convince the public and investors that it will allow prices to rise a little bit faster. If public inflation expectations slip, it can lock in slow increases. Those feed directly into the level of interest rates, and leave the central bank with even less room to cut them during times of crisis.

"If inflation expectations fall below our 2 percent objective, interest rates would decline in tandem," Mr. Powell said. "In turn, we would have less scope to cut interest rates to boost employment during an economic downturn."

Higher inflation may seem like an odd goal to anyone who buys milk or pays rent, but excessively weak price gains can actually have damaging effects on the economy. A circle of stagnation has played out in countries including Japan, in which lower price gains leave less room to cut rates, limiting policymakers' ability to stimulate the economy and resurrect inflation.

"We are certainly mindful that higher prices for essential items, such as food, gasoline, and shelter, add to the burdens faced by many families, especially those struggling with lost jobs and incomes," Mr. Powell said. "However, inflation that is persistently too low can pose serious risks to the economy."

In a question-and-answer session after the speech, Mr. Powell said the Fed was "talking about inflation moving moderately."

If the Fed can achieve slightly higher price gains, it will translate into more room for future rate cuts — and buying that extra headroom is a crucial goal in 2020. Long-running economic changes, such as an aging population with different saving habits and weaker productivity gains, have weighed on the interest rate setting that neither stokes nor slows the economy. That has left the central bank with less recession-fighting wiggle room.

Still, Mr. Powell pointed out that he and his colleagues "are not tying ourselves to a particular mathematical formula that defines the average."

Some economists questioned whether the Fed will actually manage to achieve its new inflation target.

"The Fed is announcing this policy framework in part to push up inflation expectations," said Seth Carpenter, a former Fed research official now at UBS. "In practice, however, getting above 2 percent is a long way off."

Many of the changes the Fed announced Thursday formalize an approach it has edged toward over the past decade. The Fed was patient in beginning to lift interest rates following the recession from 2007 to 2009, even as unemployment fell.

When it did start to raise borrowing costs in late 2015, under Ms. Yellen, it did so slowly.

Under Mr. Powell's leadership, the Fed has increasingly emphasized the benefits of that strong labor market, which pulled long-sidelined workers into jobs and helped to foster strong wage growth for those who earn the least.

Ms. Yellen, who has long argued that a strong labor market could boost marginalized groups, said the Fed's shift is "great" and "a recognition that tight labor markets are beneficial."

The long-run document promises that the central bank will continue to hold reviews, roughly every five years, and will continue to consult the public as it has done over the past year through its "Fed Listens" events.

"Public faith in large institutions around the world is under pressure," Mr. Powell said in a question-and-answer session following his speech. "Institutions like the Fed have to aggressively seek transparency and accountability to preserve our democratic legitimacy."

The Fed also explicitly noted in its statement that financial stability ranks among its key goals. In recent decades, expansions have ended when asset price bubbles — like the mid-2000s housing boom — got out of control, rather than at the hands of too-high inflation.

"Sustainably achieving maximum employment and price stability depends on a stable financial system," the Fed said in its statement. "Therefore, the committee's policy decisions reflect its longer-run goals, its medium-term outlook, and its assessments of the balance of risks, including risks to the financial system that could impede the attainment of the committee's goals."

Mr. Powell's remarks, and the Fed's shift, are set against an unhappy backdrop that has highlighted the central bank's limits.

Fed officials have taken action to support the economy as the pandemic-induced downturn drags on — cutting interest rates to near-zero, buying government-backed bonds in vast sums, and rolling out emergency lending programs. Still, more than one million people filed initial state jobless claims last week, data released Thursday morning showed.

The Fed has repeatedly emphasized that a strong job market and economy is an imperative goal, but that Congress will need to help achieve it.

"It is hard to overstate the benefits of sustaining a strong labor market, a key national goal that will require a range of policies in addition to supportive monetary policy," Mr. Powell said.

He added that there was a strong economy under the surface of the ongoing weakness.

"We will get through this period, maybe with some starts and stops," he said. Still, "we're looking at a long tail" as people who work in industries heavily impacted, like travel and service, struggle to find new work in a process that could take years.

"We need to support them," Mr. Powell said.

Jeanna Smialek writes about the Federal Reserve and the economy. She previously covered economics at Bloomberg News, where she also wrote feature stories for Businessweek magazine. @jeannasmialek

A version of this article appears in print on Aug. 28, 2020, Section A, Page 1 of the New York edition with the headline: Fed Chair Paves Way for a Period Of Lower Rates