#### **BEFORE THE**

#### PUBLIC UTILITY COMMISSION OF OREGON

)

)

)

In the Matter of

PacifiCorp, dba Pacific Power, 2016 Transition Adjustment Mechanism UE 296

REDACTED POST-HEARING RESPONSE BRIEF OF NOBLE AMERICAS ENERGY SOLUTIONS LLC

## I. INTRODUCTION AND SUMMARY

Noble Americas Energy Solutions LLC ("Noble Solutions") hereby respectfully submits its post-hearing response brief to the Public Utility Commission of Oregon ("OPUC" or "Commission") in the above-captioned matter. Noble Solutions has participated in this transition adjustment mechanism ("TAM") proceeding to address the transition adjustment rates applicable to PacifiCorp's direct access customers. Oregon law requires the Commission to ensure that PacifiCorp's one-year (Schedule 294), three-year (Schedule 295), and five-year (Schedule 296) opt-out programs provide PacifiCorp's customers with meaningful opportunities to access competitive markets. Noble Solutions directs the Commission to its pre-hearing memorandum for detailed legal and regulatory background, which we will not repeat in this brief. *See Noble Solutions' Pre-Hearing Memorandum* at 3-9. This post-hearing response brief highlights additional information introduced at the hearing and responds to arguments in PacifiCorp's prehearing memorandum and post-hearing opening brief.

As explained in detail below, Noble Solutions maintains its position on the two direct access rate calculation issues and clarifies its position on the direct access service request

("DASR") issue, as follows:

- The Schedule 294, 295 and 296 transition adjustments should be adjusted to reflect the value of freed-up Renewable Energy Certificates ("RECs").
   Otherwise, direct access customers will unreasonably pay for renewable portfolio standard ("RPS")-related resources twice: once from their electricity service supplier ("ESS") and a second time from PacifiCorp, which banks the RECs paid for by direct access customers for future use by cost-of-service customers.
- In calculating the Schedule 296 Consumer Opt-Out Charge, Schedule 200 costs should *not* be escalated in years six through 10 as proposed by PacifiCorp.
   Rather, Schedule 200 costs used in this calculation should decline each year from year six through year 10 to reflect the decline in the Company's return on generation rate base attributable to the departed customers' loads, due to the effects of increased accumulated depreciation.
- When a customer's DASR arrives after PacifiCorp's deadline for five-yearprogram service to start on January 1, that customer should have the option to enter the five-year program late by paying PacifiCorp all applicable five-year optout charges. To further clarify, Noble Solutions agrees with PacifiCorp that late admissions to the five-year program should be allowed only if the DASR arrives in time to allow service to commence on February 1.

# II. ARGUMENT

This case presents an opportunity to continue to refine PacifiCorp's direct access rate

calculations and service conditions to provide more meaningful retail choices for PacifiCorp's customers. PacifiCorp's direct access programs have unacceptably low participation that is due to the economic barriers imposed by PacifiCorp's program design and requirements. Noble Solutions/100, Higgins/6. Oregon's direct access law charges the Commission with overcoming these obstacles. *Noble Solutions' Pre-Hearing Memorandum* at 3-4. Additionally, properly implementing PacifiCorp's direct access programs is important at this time due to renewed focus on retail choice, including recently enacted legislation regarding voluntary renewable energy tariffs ("VRET"). Or. Laws 2014 ch. 100, § 3.<sup>1</sup> The Commission should adopt Noble Solutions' three recommendations to improve options for retail choice and prevent assessment of unjust and unreasonable rates to PacifiCorp's direct access customers.

# A. The Commission Should Adopt Noble Solutions' Proposed REC Credit in the Transition Adjustment Calculation for Schedules 294, 295, and 296.

Adopting Noble Solutions' proposed REC credit would appropriately resolve the problem that direct access customers are unjustly subsidizing the costs of RPS compliance for cost-ofservice customers. The REC credit would be a reasonable mechanism to compensate one-year, three-year, and five-year program participants for their economic utility investment in PacifiCorp's RPS resources.

# 1. Direct Access Customers Are Currently Paying Twice for RPS Compliance.

PacifiCorp's RPS obligation to retire RECs is reduced proportionately for a direct access customer's departed load, and thus the direct access election frees up RECs that were previously

<sup>&</sup>lt;sup>1</sup> Similar to Oregon's direct access law and administrative rules, the VRET law requires the Commission to consider "potential cost-shifting" to other customers prior to allowing a VRET to be filed, Or. Laws 2014 ch. 100, § 3(3)(c), and further requires that "[a]ll costs and benefits associated with the" VRET "shall be borne" by VRET customers. *Id.* at § 3(4). The outcome of this proceeding will therefore have direct bearing on implementation of the VRET law.

acquired by PacifiCorp to serve that departed load. Noble Solutions/100, Higgins/16; ORS 469A.005(11), -.052(1)(b), -.065; Tr. at 82. At the same time, the ESS must meet the RPS obligation for the direct access customer's load by retiring RECs proportionate to that direct access customer's load, which at present requires that 15 percent of supply come from qualifying renewable electricity. ORS 469A.052, -.065; Tr. 82. Moreover, the quantity of RECs that a utility or an ESS will retire for a compliance year should always correspond to the megawatt hours ("MWh") of load served by the utility or the ESS in that compliance year. *See Noble Solutions' Pre-Hearing Memorandum* at 10 n.2.

Although the law is designed such that the direct access customer will pay the ESS for RPS compliance, direct access customers still pay for PacifiCorp's RPS compliance costs. The customer does so both through Schedule 200, through which the fixed costs of utility-owned RPS-eligible resources are recovered, and Schedule 201, through which power purchases of RPS-eligible resources are recovered. Noble Solutions/100, Higgins/15; Tr. at 82-83. PacifiCorp provides no credit for the above-market costs of RPS compliance in the transition adjustment calculation. Tr. 83. Instead, PacifiCorp credits the direct access customer with GRID's estimated value of PacifiCorp's freed-up generation, which produces a valuation based on a blend of market prices and avoided costs of thermal generation. Noble Solutions/100, Higgins/11-13. PacifiCorp does not assert that its blend of market prices and avoided costs of thermal generation credits direct access customers for the additional value of RPS-compliance associated with PacifiCorp's resource portfolio. Instead, PacifiCorp acknowledges, as it must, that the direct access customer pays twice for RPS compliance – once to PacifiCorp through Schedules 200 and 201 for RECs that *are not* used to meet the RPS requirement for the

customer's load, and a second time to the ESS for the RECs that *are* used to meet the RPS requirement for the customer's load. *See* Tr. at 83-84.

#### 2. Noble Solutions' Proposal Is a Reasonable Credit for the Economic Investment in RPS Resources Freed Up by the Direct Access Election.

The Commission's administrative rules require a credit to direct access customers for "economic utility investments" that are freed up due to the direct access election. OAR 860-038-0005(18), -0160(1); *see also Noble Solutions' Pre-Hearing Memorandum* at 4. The RECs produced by PacifiCorp's generation portfolio that are freed up during the customer's term of direct access service are such an economic utility investment warranting a credit in the transition adjustment calculation. Noble Solutions/100, Higgins/16-19. Oregon's RPS allows PacifiCorp to either sell these freed-up RECs for immediate value or to bank and then retire them for compliance in future years. ORS 469A.140. Thus, RECs produced by a given RPS resource are not needed to meet the RPS obligation for a direct access customer, and may be carried forward and retired for RPS compliance in a future year. Tr. at 84-85.

The Commission should ensure that direct access customers are credited for the full economic value of freed-up RPS resources by implementing a REC credit. In the absence of a transparent market index for the value of the RECs, Noble Solutions proposes use of the average sale price of PacifiCorp's unstructured (or unbundled) RECs as a reasonable proxy price to calculate a REC credit. Noble Solutions/100, Higgins/17. For example in this year, the REC credit would be equal to the 2014 average price of unstructured RECs multiplied by the RPS's 15-percent requirement. *Id.* The average 2014 sale value of PacifiCorp's RECs was

CONFIDENTIAL **MWh** CONFIDENTIAL, which would be multiplied by 15 percent to result in a credit of CONFIDENTIAL **MWh** CONFIDENTIAL that would be added to the weighted average market price of energy freed up by direct access in the transition adjustment calculation. Confidential Noble Solutions/100, Higgins/17. The REC credit would apply to the calculation of the transition adjustment for the one-year (Schedule 294), three-year (Schedule 295), and five-year (Schedule 296) programs, as well as for the Consumer Opt-Out Charge that captures the Company's fixed costs for years six through 10 in the five-year opt-out program (Schedule 296).<sup>2</sup> Noble Solutions/100, Higgins/15-19, 22.

In addition to being consistent with Oregon law, Noble Solutions' proposal is supported by at least one other state utility commission's treatment of this same issue. The California Public Utility Commission ("CPUC") recently addressed whether to account for RPScompliance costs in determining stranded cost charges, which the CPUC refers to as the "indifference charge." *See Rulemaking regarding whether, or subject to what Conditions, the suspension of Direct Access may be lifted consistent with Assembly Bill 1X and Decision 01-09-060 (hereinafter "CPUC 2011 DA Rulemaking")*, CPUC Rulemaking Docket 07-05-025, CPUC Decision 11-12-018, slip dec. at 10-25, 2011 Westlaw 6278267 (Dec. 1, 2011). Similar to the OPUC, the CPUC calculates the stranded cost charge to direct access customers by subtracting the market value of the utility's supply portfolio (referred to as the "market price benchmark") from utility's total portfolio cost. Id. at 8. The CPUC correctly concluded that RPS resources "have a higher market price as compared to the embedded cost of the utilities' portfolios." *Id.* at

<sup>&</sup>lt;sup>2</sup> For purposes of calculating the credit associated with the Consumer Opt-Out Charge, the calculation will need to take into account the increased compliance requirements for compliance years after 2020 and 2025. Noble Solutions/100, Higgins/22:10-13.

10. It necessarily followed that the market price benchmark should include "the market value of RPS-eligible resources for purposes of calculating the indifference amount." *Id.* at 17. To calculate its RPS credit, the CPUC relies on a blending of the costs of the utility's RPS resources and renewable energy contract premiums published by the U.S. Department of Energy. *Id.* at 22-24.

Noble Solutions' proposal is conservative. While the CPUC's RPS credit essentially uses a premium, bundled REC value to calculate its RPS credit, Noble Solutions' proposal conservatively uses only the cost of PacifiCorp's *unbundled* REC sales.

Furthermore, Noble Solutions' proposal will remain reasonable even if PacifiCorp chooses to bank freed-up RECs instead of immediately selling them. In this regard, PacifiCorp's own past arguments demonstrate that Noble Solutions' proposal is conservative. In docket UP 266, the Industrial Customers of Northwest Utilities ("ICNU") argued that PacifiCorp should sell Oregon-RPS-eligible RECs, particularly high-priced RECs eligible for the California market at that time. *See In the Matter of PacifiCorp, dba Pacific Power, Application for Sale of Renewable Energy Credits*, Docket No. UP 266, Order No. 11-512, at 4 (Dec. 20, 2011). In ICNU's view, selling these high-priced RECs in the short term would be more economically valuable than banking them. However, PacifiCorp argued it should carry Oregon's share of the Oregon-RPS-eligible RECs forward indefinitely for RPS compliance in future years. The Company explained that its policy of banking the RECs "provides protection for customers against the risks associated with potentially volatile costs of future RPS compliance in the future." *Id.* at 3 (internal quotation omitted). In other words, PacifiCorp determined that a REC's short-term sale value is lower than the likely value of banking the RECs to defer future

acquisition of additional RPS resources. *See id.*; Tr. at 94. Since that time, REC "[p]rices have dropped significantly." Tr. at 86. Thus, Noble Solutions' proposal to use the short-term sale prices of PacifiCorp's unbundled RECs is likely to underestimate the full value to PacifiCorp of these freed-up RECs.

### 3. PacifiCorp's Opposition to a REC Credit Is Not Well Placed.

PacifiCorp raises a welter of arguments in opposition to a reasonable credit for RECs freed up by direct access. Each of PacifiCorp's objections, however, is misplaced.

First, PacifiCorp argues that the proposed REC credit is similar to prior proposals for a Bonneville Power Administration ("BPA") transmission credit, which the Commission has rejected. *PacifiCorp's Post-Hearing Opening Brief* at 39. However, PacifiCorp agrees there are significant distinctions. Unlike BPA transmission rights, PacifiCorp agrees that freed-up RECs have no use restrictions related to the location of the customer in Oregon and may be banked for additive value in future years. Tr. at 93. Additionally, in opposing a transmission credit, PacifiCorp has argued that it may need to purchase additional transmission to deliver freed-up generation to market; but PacifiCorp agrees that this limitation has no applicability to recognizing the value of freed-up RECs. Noble Solutions/204, Hearing Exhibit/2. PacifiCorp has also argued it must retain scarce BPA transmission rights in case the direct access customer returns to bundled service. But PacifiCorp agrees its RPS resources would generate new RECs in future years, and, even if necessary, PacifiCorp could easily acquire additional RECs when the customer returns. *Id.* at 3-5. In short, freed-up RECs contain far less limitations than freed-up BPA transmission, and PacifiCorp's comparison is therefore inapt.

PacifiCorp further asserts that it cannot sell the RECs because, according to PacifiCorp,

"the Company is required to bank all Oregon RECs not used for RPS compliance." *PacifiCorp's Post-Hearing Opening Brief* at 39 (citing *In the Matter of PacifiCorp, dba Pacific Power, Application for Sale of Renewable Energy Credits*, Docket No. UP 266, Order No. 11-512). In fact, however, there is no Commission order that precludes PacifiCorp from seeking approval to sell RECs freed up by a direct access election. Tr. at 97-98. As is the case with any other utility property, PacifiCorp is free to request Commission approval under ORS 757.480 to sell its Oregon-RPS-eligible RECs that are freed up by direct access if PacifiCorp believes doing so is in the best interests of its remaining cost-of-service customers.

As we demonstrated above, however, PacifiCorp does not need to sell the RECs to receive value from them. Oregon law allows PacifiCorp to indefinitely bank freed-up RECs to provide value to cost-of-service customers even if those RECs are not ever sold. PacifiCorp's assertion that the RECs must be sold to recognize any value is therefore wrong. In an analogous situation, California utilities argued against an RPS credit for certain California RECs that could not be sold. *CPUC 2011 DA Rulemaking*, CPUC Decision 11-12-018, slip dec. at 11, 24. But the CPUC implemented the credit on the basis that "[e]ven if the IOUs cannot sell the renewable attributes, they still benefit from them." *Id.* at 24. The same is true in Oregon for RECs that are not sold.

PacifiCorp's witness, Mr. Brian Dickman, further testified that, even if the RECs were sold, it would be unnecessary to include a transition adjustment credit because direct access customers would receive a "share" of the sale value through another balancing account mechanism. PAC/500, Dickman/84:3-8. In fact, the balancing account mechanism Mr. Dickman relies upon was developed only for RECs that are *ineligible* for Oregon's RPS. Noble Solutions/200, Hearing Exhibit 1-2; *In the Matter of PacifiCorp, dba Pacific Power: Application Requesting Approval of Sale of Renewable Energy Credits*, Docket No. UP 260, Order No. 10-210 (June, 2010). If the Commission were to approve the sale of Oregon-RPS-eligible RECs freed up by direct access, it could impose any necessary conditions to ensure that direct access customers would not receive any share of the sale proceeds. In any event, even under the balancing account mechanism PacifiCorp cites, the direct access customer would only receive a de minimis share of the freed-up REC's value. Tr. at 98-102. Mr. Dickman agreed that for each dollar PacifiCorp would receive for selling a REC that is freed up by a direct access election, the direct access customer would receive only 1.4 cents through this existing balancing account rebate. Tr. at 100-101. In its post-hearing brief, PacifiCorp appears to have wisely abandoned Mr. Dickman's argument that a credit of 1.4 cents on the dollar is reasonable.

PacifiCorp further argues that it has been unable to sell all of the RECs it has attempted to sell in recent years. Tr. at 87, 91; *see also PacifiCorp's Post-Hearing Opening Brief* at 39. PacifiCorp's witness conveniently made this assertion for the first time at the hearing, providing no opportunity for discovery into the potential reasons why PacifiCorp may not have sold all of the RECs it allegedly attempted to sell. In any event, even when REC sale values were far higher, PacifiCorp argued it was more prudent to bank the RECs than to sell them. Thus, based on PacifiCorp's own prior arguments in docket UP 266, the freed-up RECs are still more valuable banked, and the recent sale prices represent a conservative valuation of the renewable attribute of the freed-up generation.

Finally, PacifiCorp's vague and unclear assertion of logistical concerns with tracking freed-up RECs amount to nothing more than hand waving. *PacifiCorp's Post-Hearing Opening* 

*Brief* at 40; Tr. at 109-110. The Company's assertion that recognizing a REC credit in the transition adjustment would require it to create multiple REC banks reflecting RECs that are sold is a meritless attempt to confuse the issues. PacifiCorp ignores that the direct access customer receiving a REC credit would not escape paying for RECs to comply with Oregon's RPS while receiving direct access service; rather, the customer must purchase RPS-compliant power from its ESS. The REC credit merely prevents the customer from having to pay twice for compliance. Consequently, there is no special benefit conveyed to this customer returns to cost-of-service rates in a future year, then that customer will pay for PacifiCorp's RPS compliance in that year – just the same as every other cost-of-service customer – and should be entitled to its pro rata share of then-available RPS resources on a non-discriminatory basis. To the extent that PacifiCorp believes it must implement some additional charge to cost-of-service customers to implement a REC credit, PacifiCorp possesses the right and the resources to do so, although it has failed to clearly explain such a need in this case.<sup>3</sup>

In sum, requiring direct access customers to pay twice for RPS compliance is an obstacle to retail choice, and PacifiCorp's assertions to the contrary are yet another example of its uncooperative approach to providing its customers with meaningful retail choice. The Commission should adopt Noble Solutions' reasonable proposal for a REC credit.

# B. The Commission Should Require PacifiCorp to Properly Account for Depreciation in Schedule 296.

The record in this proceeding contains new evidence that compels a modification to

<sup>&</sup>lt;sup>3</sup> Notably, no customer groups that are party to this proceeding appear to object, and at least one, ICNU, has expressed support for Noble Solutions' proposal. ICNU/200, Mullins/13.

PacifiCorp's proposed calculation of the Consumer Opt-Out Charge for customers electing the new five-year opt-out program. PacifiCorp proposes to escalate the fixed costs of generation resources paid for by direct access customers for a full 10 years after the customer stops utilizing those resources. However, Noble Solutions presented un-rebutted evidence that the costs of these assets attributable to five-year opt-out customers will in fact decline due to the effect of depreciation of rate base after the customer's opt-out election. Therefore, the Commission should incorporate the effects of depreciation into the charge to prevent the assessment of unjust and unreasonable rates to participants of the five-year program.

#### 1. The Policy Behind the Consumer Opt-Out Charge.

In docket UE 267, the Commission allowed PacifiCorp to include a Consumer Opt-Out Charge in its five-year program. The underlying policy determination was that the five-year optout customer must pay a charge for the above-market costs attributable to PacifiCorp's generation assets in Schedule 200 in years six through 10 after the opt-out election. *See In the Matter of PacifiCorp, dba Pacific Power: Transition Adjustment, Five-Year Cost of Service Optout*, OPUC Docket No. UE 267, Order No. 15-060, 4-7 (Feb. 24, 2015). This policy allows PacifiCorp to update the Schedule 200 rates assessed to customers in the five-year program during the five-year transition period. *Id.* However, the Commission did not suggest that the direct access customers electing to enter the five-year program should be responsible for any *additional* fixed-generation costs PacifiCorp adds to its rate base in years six through 10 *after* the customer stops using PacifiCorp's generation resources.

///

///

## 2. Noble Solutions' Proposal Corrects an Error in PacifiCorp's Proposed Calculation of the Consumer Opt-Out Charge.

PacifiCorp's proposed calculation of the Consumer Opt-Out Charge overlooks standard regulatory accounting principles and results in an inflated charge for the above-market costs of its generation assets. PacifiCorp would include in the opt-out charge its current Schedule 200 costs *escalated* at the rate of inflation over the 10 year period. Noble Solutions/100, Higgins/23. PacifiCorp has provided no credible reason why direct access customers should hold PacifiCorp harmless from the effects of inflation for a full 10 years after the customer stops using PacifiCorp's assets.

In contrast, Noble Solutions' witness, Mr. Kevin Higgins, demonstrated that PacifiCorp's *incremental* fixed generation costs that it may decide to incur during years six through 10 should not be incurred on the departed customer's behalf. Noble Solutions/100, Higgins, 23-24. Mr. Higgins testified there is no basis for escalating the fixed costs assigned to a customer in the five-year program for a full 10 years after the customer provided notice of its decision not to use PacifiCorp's generation assets. *Id.* Rather, the opt-out charge for years six through 10 should be limited to the generation investment incurred on that customer's behalf *prior to the sixth year after departure* from cost-of-service rates. *Id.* Under basic rate-making principles, once that portfolio of assets is "frozen" for the purposes of this stranded cost calculation, the revenue the Company earns from its return on these assets will decline each year as a portion of those assets is depreciated and amortized. *Id.* 

Mr. Higgins' position is consistent with Oregon's direct access law. Oregon law allows PacifiCorp to implement transition charges for "uneconomic utility investments," but only if the assets at issue fall within the definition of that term. ORS 757.600(31), -.600(35), -.607(2). Fundamentally, PacifiCorp must demonstrate that *escalation* of the existing costs in Schedule 200 is necessary in order to recover an "uneconomic utility investment" under ORS 757.600(35). However, that term does encompass resources that PacifiCorp acquires *after* the departure of the direct access customer. Instead, an "uneconomic utility investment" includes generation assets "that *were* prudent at the time the obligations *were* assumed but the full costs of which are no longer recoverable as result of ORS 757.600 to 757.667, absent transition charges." ORS 757.600(35) (emphasis added). The statute's use of the past tense in describing the time of acquisition of the pool of potential assets for which PacifiCorp may charge the direct access customer does not allow recovery for utility acquisitions made six years or more after the customer opted out. To assign such costs to a direct access customer unlawfully shifts costs to that customer beyond the limits of what Oregon law allows.

This concept, embodied in Mr. Higgins' proposal, is also consistent with standard ratesetting principles applied elsewhere. Regulators elsewhere agree that the stranded cost calculation should ensure that a departed direct access customer does not pay for costs of resources acquired after the load departs. *See CPUC 2011 DA Rulemaking*, CPUC Decision 11-12-018, slip dec. at 9 (discussing the CPUC's intent to "ensure that departing load does not pay for above-market costs of utility procurement commitments after the load departs"). It is further a basic tenet of rate-setting that the return on any given asset in rate base will decline over time. *See, e.g.*, Bonbright, J. et al., *Principles of Public Utility Rates*, at 270-71 (2nd ed., 1988). And it is also therefore well established that for purposes of a stranded cost calculation the revenue requirement of a set of generating plants is "generally a steadily declining function." G.

Basheda, et al, *The FERC, Stranded Cost Recovery and Municipalization*, 19 Energy L. J. 351,
367 (1998). Thus, PacifiCorp's proposal to escalate the costs of the set of resources existing at
the time of departure from the system is a regulatory outlier that the Commission should correct.

Noble Solutions recommends two changes to PacifiCorp's proposed treatment of assumed fixed-generation costs in the Consumer Opt-Out Charge. First, the assumed Schedule 200 costs in the Consumer Opt-Out Charge should not be escalated in years six through 10. Noble Solutions/100, Higgins/23-24. This approach still allows the assumed Schedule 200 cost in the Consumer Opt-Out Charge to be escalated during the first five years, consistent with outcome in UE 267 that customers in the program may have Schedule 200 costs updated during the five-year period. *See id.*; Noble Solutions/104, Higgins/2-3. Second, the Schedule 200 entry should decline by approximately 2.36 percent per year from years six through 10 to properly account for depreciation and reduced returns. Noble Solutions/100, Higgins/24-25; Noble Solutions/104/1-3. These two refinements reduce PacifiCorp's sample Consumer Opt-Out Charge from \$8.24 per MWh to \$5.56 per MWh for Schedule 30-S and from \$5.75 per MWh to \$3.26 per MWh for Schedule 48-P. Noble Solutions/100, Higgins/25. While the Consumer Opt-Out Charge will still be a major impediment to retail choice, these reductions in the charge's magnitude are just and reasonable.

### **3.** No Evidence Contradicts the Proposal to Account for Depreciation.

The record is devoid of evidence refuting Mr. Higgins' testimony on the effects of depreciation on the calculation of the Consumer Opt-Out Charge. On cross examination, the best PacifiCorp's witness could manufacture was a vague assertion that "[o]ther charges escalate over time, and that rate does not stay constant and typically does not decline over time." Tr. at 105.

Mr. Dickman did not elaborate in his pre-filed or live testimony as to how any element of the closed pool of assets in Schedule 200 could have escalating costs over the sixth through tenth years after an opt-out election. Nor did Mr. Dickman testify that such costs would even partially offset the effect of depreciation in Schedule 200. Yet PacifiCorp argues in its legal brief that "numerous components of the consumer opt-out charge . . . will increase at a rate greater than inflation in the years six through 10." *PacifiCorp's Post-Hearing Opening Brief* at 41. Because PacifiCorp's witness did not testify that any elements of Schedule 200 increase at a rate greater than inflation, the Commission should reject PacifiCorp's post-hoc explanation in its brief. However, even PacifiCorp's brief fails to identify any way that the components of Schedule 200 could increase in cost in the sixth year after freezing the assets contained in Schedule 200.

While unclear, PacifiCorp appears to argue that it should be allowed to charge customers in the five-year program for fixed-cost assets it will acquire after the end of the five-year transition period. However, as noted above, newly acquired assets cannot be fairly attributed to the direct access customers after they have provided reasonable notice that they will stop using those assets. There is no basis for PacifiCorp to keep acquiring generation assets for the direct access customer in year six after the customer enters the five-year program.

PacifiCorp also incorrectly argues that Noble Solutions failed to explain why the Commission should treat years six through 10 differently from the first five years. *PacifiCorp's Post-Hearing Opening Brief* at 41. It is true that all parties to docket UE 267 agreed to assess to program participants any increases in Schedule 200 during years one through five, along with any other updates that might occur during that period, including the effects of depreciation. Likewise, Noble Solutions' proposal conservatively allows for the assumed Schedule 200 costs

in the Consumer Opt-Out Charge to be escalated during the first five years, prior to ending escalation of those costs and applying the effects of depreciation. *See* Noble Solutions/104, Higgins/2-3. However, contrary to PacifiCorp's assertion, Noble Solutions' evidence fully addressed the issue. Mr. Higgins testified that the charge "should be limited to generation investment that had been built for the departed customer's benefit. *At the maximum*, this would extend to the five year planning horizon following the customer's departure (i.e., years 1 through 5 of the opt-out period)." Noble Solutions/100, Higgins/23 (emphasis added). Mr. Higgins reasonably asserted that five years is the *maximum* amount of time reasonable to charge customers for assets acquired after the opt-out election – an assertion that remains un-rebutted in the evidentiary record.

PacifiCorp also points to inflation to justify the escalation of costs in years six through 10. *PacifiCorp's Post-hearing Opening Brief* at 40. According to PacifiCorp, its treatment "in real terms, holds fixed generation costs constant through year 10." *Id.* (citing PAC/500, Dickman/84-85; Tr. at 105). This argument fails. As is explained above, the closed pool of assets that exist after the five-year opt-out period should *decline* in cost to rate payers and not be arbitrarily held constant. PacifiCorp's proposal to escalate these fixed costs would unlawfully shift costs from five-year opt-out customers to cost-of-service customers or PacifiCorp's shareholders, and must be corrected.

#### 4. The UE 267 Orders Do Not Bar Adoption of Noble Solutions' Proposal.

PacifiCorp and Staff believe that the orders in docket UE 267 preclude the Commission from even considering Noble Solutions' new evidence on the proper treatment of depreciation in the Consumer Opt-Out Charge. *See PacifiCorp's Post-Hearing Opening Brief* at 40; Staff/200, Ordonez/27.

At the outset, these arguments fail as a matter of law because the Commission has an ongoing statutory duty to ensure that PacifiCorp's rates are just and reasonable. ORS 756.040(1); ORS 757.210(1) PacifiCorp has not even attempted to rebut Noble Solutions' argument that this is a quasi-legislative rate-setting proceeding, and therefore prior orders cannot preclude the proper calculation of the Consumer Opt-Out Charge in this proceeding. *See Noble Solutions' Pre-Hearing Memorandum* at 14.<sup>4</sup> Indeed, Mr. Dickman agreed that if PacifiCorp found an error in the calculation of the rate that benefitted direct access customers, PacifiCorp would promptly correct the error. Tr. at 106. Therefore, even if the Commission had approved rates in docket UE 267, the Commission has a statutory obligation after a proper showing of evidence, to change rates to ensure they are just and reasonable. *American Can Co. v. Davis*, 28 Or. App. 207, 224, 559 P.2d 898 (1977). The Commission cannot simply ignore Noble Solutions' new evidence, as PacifiCorp and Staff suggest.

In any event, Noble Solutions' proposal is consistent with the orders in docket UE 267. The Commission explained that the purpose of docket UE 267 was merely "to approve tariffs for PacifiCorp' s Five-Year program," and "if in the future the [parties] believe that they have *new evidence* or arguments demonstrating that the customer opt-out charge is unjust or unreasonable, they may seek our review at that time." *In the Matter of PacifiCorp, dba Pacific Power: Transition Adjustment, Five-Year Cost of Service Opt-Out*, OPUC Docket No. UE 267, Order No. 15-195 at 2-3 (June 16, 2015) (emphasis added). Noble Solutions has presented such *new* 

<sup>&</sup>lt;sup>4</sup> If PacifiCorp addresses these issues for the first time in its post-hearing reply brief, Noble Solutions reserves the right to file a sur-reply brief to the extent necessary to respond to any new arguments.

*evidence* in this docket regarding a specific component of the Consumer Opt-Out Charge. The new evidence merely proposes a refinement to the rate calculation, which is a common practice in the Commission's TAM proceedings.<sup>5</sup>

PacifiCorp also faults Noble Solutions for not presenting evidence regarding the depreciation assumption in docket UE 267. But this is not a case where a party has sat on its rights. At the time that Noble Solutions and the other Stipulating Parties presented their only rounds of testimony in docket UE 267, PacifiCorp's proposal was to assess 20 years of above-market Schedule 200 costs to participants in the five-year program. *In the Matter of PacifiCorp, dba Pacific Power: Transition Adjustment, Five-Year Cost of Service Opt-out*, Order No. 15-060 at 2, 6-7. There was no reason to pick around the edges of PacifiCorp's initially formulated Consumer Opt-Out Charge because the only reasonable response to the 20-year charge was to present testimony that it should be rejected in its entirety. We thus had no opportunity in UE 267 to present detailed testimony regarding appropriate refinements to make to a 10-year charge.

In sum, Noble Solutions' proposal is consistent with standard rate-setting practices and this Commission's own directives in docket UE 267. The Commission should therefore adopt Noble Solutions' proposed treatment of depreciation in the Consumer Opt-Out Charge.

///

///

<sup>&</sup>lt;sup>5</sup> The Commission has encouraged parties to propose such refinements to calculation of direct access rates ever since the annual TAM's creation. *In Re Pacific Power and Light: Request for General Rate Increase*, OPUC Docket No. UE 170, Order No. 05-1050, at 19-21 (Sept. 28, 2005) ("We are somewhat concerned about establishing the TAM with its annual update because there is a certain amount of one-sidedness to PacifiCorp's annual updates without concomitant adjustments by intervenors and Staff. We will continue to look at the TAM and investigate to whatever extent we believe is necessary."); *see also* Noble Solutions/100, Higgins/13-14 (discussing past adjustments to the calculation of direct access rates in the annual TAM proceeding).

# C. The Commission Should Adopt Noble Solutions Reasonable Proposal for a Late DASR.

Noble Solutions has made a reasonable proposal that will prevent an administrative error from thwarting a customer's election to enter the new five-year program. *See* Noble Solutions/100, Higgins/26-31. PacifiCorp's lead position is that a DASR that arrives just one day late – for whatever reason – necessitates that the customer be automatically un-enrolled in the five-year program and instead be enrolled in the one-year program. Yet Noble Solutions' proposal addresses PacifiCorp's primary concern by ensuring that the customer commencing service in the five-year program late still pays all applicable five-year program charges. PacifiCorp implicitly acknowledges Noble Solutions' proposal is reasonable and alternatively proposes a February 1 cut-off date for commencement of direct access service. Noble Solutions has no objection to PacifiCorp's alternative proposal for a February 1 cut-off date, and therefore this issue should be easily resolved by the Commission. However, since PacifiCorp continues to argue its lead position, we fully address below why it is entirely unreasonable to automatically bump a five-year customer into the one-year program if the DASR is a few days late.

#### **1.** Background on the Requirements for Submittal of a DASR.

Switching to direct access service requires at least two submissions to PacifiCorp. First, PacifiCorp's Rule 22 requires the departing direct access customer to submit a Change of Service Election Declaration ("CSED") during the election window. Tr. at 119; Noble Solutions/207, Hearing Exhibit/30. Second, the ESS must submit to PacifiCorp a DASR, which is an electronic submission of information required to effect the switching of such customer's supplier. OAR 860-038-445(2); Tr. at 119. The Commission's administrative rules require the ESS to submit

the DASR at least 13 business days prior to the effective date of the direct access service, which this year requires a successful submission on or before December 14, 2015, for service commencing on January 1, 2016. OAR 860-038-0445(8), (9)<sup>6</sup>; Errata Noble Solutions/100, Higgins/27. Thus, a DASR that is submitted in acceptable form after December 14, 2015, will be a late DASR. Tr. at 120, 124.

### 2. PacifiCorp's Proposed Treatment of a Late DASR Denies Customer Choice.

PacifiCorp proposes differential treatment for customers attempting to enroll in the fiveyear program. PacifiCorp has consistently honored the direct access election even in the event of a late DASR for the one-year and three-year programs. Noble Solutions/100, Higgins/28; Noble Solutions/105, Higgins/4-5. PacifiCorp states it will continue to honor late DASRs for the oneyear and three-year programs. Noble Solutions/105, Higgins/6-7. Yet, for the five-year program, PacifiCorp proposes to deny participation in the program by a customer tied to a late DASR, even if the DASR is only one day late. *Id.* Under PacifiCorp's interpretation of its rules and tariffs, PacifiCorp will automatically bump a customer with a late DASR for the five-year program into the one-year program. Tr. at 123. PacifiCorp has articulated only one legitimate reason why the five-year program must be treated differently – specifically, that the five-year program entails five full years of charges before leaving cost-of-service rates entirely, and a customer that begins service after January 1 of the first year in the program could avoid paying some of those charges. Tr. at 121-122, 132.<sup>7</sup>

<sup>&</sup>lt;sup>6</sup> Specifically, the administrative rule provides that the ESS must obtain PacifiCorp's acceptance of the DASR at least 10 business days prior to the effective date of the change of service, and the rule provides PacifiCorp with three business days to accept or reject a DASR. OAR 860-038-0445(8), (9).

<sup>&</sup>lt;sup>7</sup> PacifiCorp's witness also argued that the cap on enrollment in the five-year program justifies differential treatment, but as discussed *infra* that reason is not a legitimate basis for concern.

#### 3. Noble Solutions' Proposal for Late DASRs Is Reasonable.

Noble Solutions' proposal would allow the customer tied to a late DASR to still enter the five-year program if the customer pays PacifiCorp all applicable five-year opt-out charges that would have applied between January 1 and the effective date of the late DASR. Noble Solutions/100, Higgins/30-31. PacifiCorp's witness, Ms. Judith Ridenour, agrees that Noble Solutions' proposal addresses PacifiCorp's concern regarding a customer avoiding the program's charges and further agrees this proposal is reasonable if the Company is allowed to impose a February 1 cut-off date for commencement of service. Tr. at 133-134. Noble Solutions clarifies here that it has no objection to a cut-off date to start service on February 1, which is consistent with Noble Solutions' objectives. In light of this reasonable resolution, PacifiCorp's lead position – which provides no accommodation for any late DASRs for the five-year program – is entirely unreasonable.

#### 4. The Risk of Submitting a Late DASR Is Significant.

PacifiCorp has suggested there is no basis to expect that a DASR may be submitted late, but several facts in the record demonstrate that an administrative error can easily lead to a late DASR submission.

First, there have been 11 instances in the past where a DASR was submitted after the cutoff for service on January 1 under the one-year and the three-year programs. Noble Solutions/105, Higgins/4-5. These past instances alone demonstrate that submission of a late DASR in not just a remote possibility. Instead, it is a very real possibility.

Second, the election window for the new five-year program reaches into December and thus imposes a significant risk that in the limited available time between the Thanksgiving and

December holidays, the ESS will be unable to timely complete and submit the DASR. *See* Errata Noble Solutions/100, Higgins/27-28. If the customer waits until the end of the election window to authorize the ESS to submit the DASR, the ESS will have only one week – from Tuesday, December 8, 2015, to Monday, December 14, 2015 – to correctly submit the DASR. Tr. at 141.

Third, an administrative error could easily lead to a late DASR. The information that must be provided includes the customer's account number, multiple DUNs numbers, the customer's meter identification number, as well as other data and information. Tr. 127-128; Noble Solutions/207, Hearing Exhibit/31-32. Some of the identifying numbers include 10 to 15 digits that must be input into the electronic submission. Tr. 127-128. PacifiCorp's witness agrees that this information could be incorrectly input into a DASR because "mistakes are possible." Tr. at 128. If the submitted DASR contains incorrect data, PacifiCorp may reject the DASR. PacifiCorp's Rule 21 specifically states that a DASR may be rejected if, among other reasons, the "information provided by the ESS on the DASR is false or inaccurate in any material respect." Noble Solutions/207, Hearing Exhibit/15. Rule 21 further provides PacifiCorp with three business days to reject an erroneous DASR. *Id.* If the DASR is rejected, the ESS must resubmit the DASR. But the corrected DASR must still be submitted at least 13 business days prior to commencement of service. *Id.*; OAR 860-038-0445(8), (9).

Fourth, aside from any delays attributable to the customer or the ESS, PacifiCorp's Rule 21 even contemplates PacifiCorp being the source of the inability to timely process a DASR to enable service to commence on January 1. Specifically, Rule 21 provides: "If the Company receives a volume of DASRs that exceeds the amount that the Company can process in an accurate and timely manner, the Company will promptly notify the Commission and will

promptly process the DASRs it receives on a nondiscriminatory basis." Noble Solutions/207, Hearing Exhibit/16. Thus, even PacifiCorp itself could be the source of the delay in timely acceptance or rejection of the DASR.

To illustrate, imagine an example where the customer authorizes the ESS to submit the DASR on the last day of the election window, and the ESS then promptly submits the DASR on the next business day, Tuesday, December 8, 2015. If the DASR contains an error – regardless of whether that error originated with data supplied to the ESS or occurred in the ESS's act of inputting the digits or information into the electronic DASR – the ESS can expect to receive PacifiCorp's rejection of the DASR three business days later on Friday, December 11, 2015, perhaps at the end of the day. The ESS must then locate the correct information and complete the new submission before the end of the day on Monday, December 14, 2015, because a submission on the next day will be a late DASR. The ESS may not even possess the correct information itself, and may need to retrieve it from the customer in this limited time period. *See PacifiCorp's Post-Hearing Opening Brief* at 41 (noting the information is "available to the ESS from the customer"); PAC/800, Ridenour/2 (same). If PacifiCorp exercises its right in the tariff to extend its three business days to reject the DASR, a timely correction by the ESS will be impossible.

Thus, it is not difficult to imagine an inadvertent error causing a DASR to be late, and PacifiCorp's suggestion that there could never be a reasonable mistake or administrative issue that leads to a late DASR is entirely misplaced.

### 5. Response to Commissioner Bloom's Bench Request.

At the hearing, during questioning regarding whether PacifiCorp had considered the

potential financial consequences of refusing to allow a customer to participate in the five-year program due to a late DASR, Commissioner Bloom requested that Noble Solutions explain in its post-hearing brief the risk to the customer of PacifiCorp's proposed policy. Commissioner Bloom specifically asked: "If somebody pays five years' of electricity, isn't there a condition to that payment that they have to be accepted into the direct access program?" Tr. at 129.<sup>8</sup> As explained below, while each commercial transaction is unique, it is reasonable to expect that PacifiCorp's proposed DASR policy will place some customers at risk of significant financial losses that are associated with having purchased electricity through an ESS during the election window in November or early December that the customer cannot subsequently use due to an unreasonable policy. Although honoring the customer's opt-out election is reason enough to adopt Noble Solutions' proposal, the risk of financial harm for some customers provides an additional basis to make a reasonable accommodation for a late DASR.

By way of background, some Oregon direct access customers demand a fixed-price electricity product during the time the election window is open. This "locks in" any potential

MR. ADAMS: It's a good question. I don't know the answer -

MR. BLOOM: I think that's really relevant. And obviously, this witness doesn't know. But it's really important for me to know.

MR. ADAMS: Okay.

MR. BLOOM: Thank you.

Tr. at 129.

<sup>&</sup>lt;sup>8</sup> Specifically, Commissioner Bloom's request was made in the following colloquy:

MR. BLOOM: Mr. Adams, I'm going to ask you a question, and I want you to put it in your brief. If somebody pays five years' of electricity, isn't there a condition to that payment that they have to be accepted into the direct access program?

value proposition and will provide the customer the assurances that participating in the five-year program will at least have comparable cost predictability to remaining on the utility's bundled service. Customers purchasing a fixed-price product lock in the market prices in effect at the time of the opt-out election and avoid the risk of the market prices increasing between the time of the opt-out (during the election window) and the time the customer begins accepting deliveries of the fixed-price energy product on January 1. If such customer were to enroll in the five-year program in November or early December and wait until January 1 to purchase its electricity, that customer would expose itself to the risk that market prices could increase, materially impacting the economics supporting its decision.

To honor a customer's choice to lock in a fixed-price product during the election window, the ESS must purchase the electricity on behalf of the customer at that time in order to ensure that the electricity can be delivered at the price relied upon by the customer. If PacifiCorp ultimately rejects the customer's entrance to the five-year program due to an error in timely submitting a flawless DASR, the ESS must liquidate the pre-purchased electricity back into the market. If the customer is very large, it may not be possible to liquidate all of the pre-purchased electricity at one time. Additionally, any liquidation sale that is possible will be made at a loss if the market price has gone down from the time the customer first contracted during the shopping window.

The answer to Commissioner Bloom's question turns on the terms of the commercial arrangement between the ESS and the customer selecting a fixed-price product – whether the contract assigns the risk of loss resulting from rejection into the program to the customer or the ESS. Due to the risks and benefits involved in the direct access transaction, the ESS is unlikely

to accept the risk that some party – which could include anyone from the customer, PacifiCorp, or the ESS – will input data incorrectly in the process of attempting to timely submit a flawless DASR. So the risk of rejection from the five-year opt-out program due to an administrative error will most likely be borne by the customer. Thus, the answer to Commissioner Bloom's question – whether the fixed-price customer's obligation to pay for five years' of electricity is conditioned upon final acceptance to the program – is, generally speaking, "no," the customer will carry the risk of PacifiCorp's punitive DASR acceptance policy.

Even if the risk could be shifted away from the customer, however, the threat of a human error causing a late DASR to be rejected will cast a dark cloud over the entire transaction. The proposal put forth by PacifiCorp will result in an unreasonably punitive outcome for what is only a simple human error or administrative oversight. Such an unintentional administrative error should not result in the liquidation of a complicated commercial transaction when there is a perfectly workable solution that makes all parties whole, to accommodate a DASR that is finally accepted just a few days late.

#### 6. PacifiCorp's Remaining Arguments Lack Merit.

The Company also points to the five-year program's cap of 175 average megawatts ("aMW"), a possibility that the rejected customer may again attempt to enroll in the following year, and the Company's position in docket UE 267. But these remaining arguments against a reasonable accommodation for a late DASR are not well placed.

The five-year program's 175-aMW cap is not a legitimate basis upon which to refuse to make reasonable accommodations for a late DASR. For purposes of measuring compliance with the program cap, PacifiCorp has indicated that it will track customers as of the time it receives a

correctly completed DASR. Noble Solutions/206, Hearing Exhibit/1-2; Tr. at 138. Each enrolled customer counts towards the cap whether the customer's final DASR is received in 2015, 2016, 2017, or any subsequent year, and PacifiCorp must therefore keep track of the cumulative enrollment across all years. Tr. at 137-138. Inexplicably, however, PacifiCorp's witness testified that accommodating late DASRs will "make tracking difficult." Tr. at 133. PacifiCorp provided no explanation as to why modern computer programs are able to allow the Company to keep track of enrollment in the program across multiple years but somehow limit the ability to keep track of the enrollment level for a few additional days each year to accommodate a late DASR. Tr. at 138. The Company's argument is disingenuous, at best, and should be rejected.

PacifiCorp also suggests the rejected customer can simply enroll in the five-year program the next year. *See* PAC/800, Ridenour/3. However, this solution deprives the customer of the economic transaction it chose. Instead of having the five-year charges from the current year that it chose, such a customer would be assessed the current year's one-year charges and next year's five-year charges. This outcome turns the economics relied upon by the customer on their head. Additionally, the next year's enrollment period may not even exist if the 175-aMW cap is filled in the year the customer attempted to opt out.

Finally, as with its position on other issues, the Company relies on its position in docket UE 267. However, none of the Company's proposed tariffs that initiated docket UE 267 clearly articulated the Company's draconian DASR policy. Instead, the Company waited until its reply testimony to clearly articulate how it proposed to implement its tariffs. *See* PAC/800, Ridenour/3:2-17 (quoting the *reply* testimony of Ms. Joelle Steward in docket UE 267). No

party in UE 267 had an opportunity to file responsive testimony to Ms. Steward's reply testimony. Instead, the Stipulating Parties in docket UE 267 argued in legal briefing that the entire election window for PacifiCorp's program should occur two weeks earlier to avoid the late DASR problem altogether. *In the Matter of PacifiCorp, dba Pacific Power: Transition Adjustment, Five-Year Cost of Service Opt-out*, Order No. 15-060 at 12. This docket is the first proceeding where we have had the opportunity to fully investigate and present testimony regarding PacifiCorp's treatment of late DASRs. Therefore, in addition to being substantively reasonable, Noble Solutions' proposal is proceedurally proper, and should be adopted.

## **III. CONCLUSION**

The Commission should adopt Noble Solutions' three reasonable proposals in this docket to ensure direct access customers are assessed just and reasonable rates and are provided with meaningful for retail choice.

DATED this 28th day of September, 2015.

RICHARDSON ADAMS, PLLC

Gregory M. Adams (OSB No. 101779) 515 N. 27<sup>th</sup> Street Boise, Idaho 83702 Telephone: (208) 938-2236 Fax: (208) 938-7904 <u>greg@richardsonadams.com</u> Of Attorneys for Noble Americas Energy Solutions LLC

#### **CERTIFICATE OF SERVICE**

I HEREBY CERTIFY that on the 28<sup>th</sup> day of September, 2015, a true and correct copy of the confidential material contained in NOBLE AMERICAS ENERGY SOLUTIONS LLC's POST-HEARING RESPONSE BRIEF in Public Utility Commission of Oregon Docket UE 296 was served via second-day delivery to the individuals below qualified to receive confidential material noted by the (C), and all parties were served the redacted version through electronic filing:

Michael T Weirich (C) PUC STAFF- DEPARTMENT OF JUSTICE 1162 Court St. NE Salem OR 97301-4096 michael.weirich@doj.state.or.us

Jorge Ordonez (C) OREGON PUBLIC UTILITIES COMM. PO Box 1088 Salem OR 97308-2148 jorge.ordonez@state.or.us

Sommer Templet (C) CITIZENS' UTILITY BOARD OF OREGON 610 SW Broadway St., Ste. 400 Portland OR 97205 sommer@oregoncub.org

Robert Jenks (C) CITIZENS' UTILITY BOARD OF OREGON 610 SW Broadway St., Ste. 400 Portland OR 97205 bob@oregoncub.org

OPUC Dockets CITIZENS' UTILITY BOARD OF OREGON 610 SW Broadway St., Ste. 400 Portland OR 97205 dockets@oregoncub.org S Bradley Van Cleve (C) DAVISON VAN CLEAVE PC 333 SW Taylor St., Ste 400 Portland OR 97204 mjd@dvclaw.com

Jesse Cowell (C) DAVISON VAN CLEAVE PC 333 SW Taylor St., Ste 400 Portland OR 97204 jec@dvclaw.com

Bradley Mullins (C) MOUNTAIN WEST ANALYTICS 333 SW Taylor St., Ste 400 Portland OR 97204 brmullins@mwanalytics.com

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

Katherine A McDowell (C) McDowell Rackner & Gibson PC 419 SW 11<sup>th</sup> Ave Ste 400 Portland OR 97205 katherine@mcd-law.com

Matthew McVee PacifiCorp 825 NE Multnomah St., Ste. 200 Portland, OR 97232 matthew.mcvee@pacificorp.com PacifiCorp, dba Pacific Power Oregon Dockets 825 NE Multnomah St., Ste. 200 Portland, OR 97232 oregondockets@pacificorp.com

Signed:

Gregory M. Adams