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April 24, 2015

VIA ELECTRONIC AND U.S. MAIL

PUC Filing Center
Public Utility Commission of Oregon
PO Box 1088
Salem, OR 97308-1088

**Re: UM _____ – In the Matter of IDAHO POWER COMPANY Application to Lower
Standard Contract Eligibility Cap and to Reduce the Standard Contract Term**

Attention Filing Center:

Attached for filing is an electronic copy of Idaho Power Company's Application to Lower Standard Contract Eligibility Cap and to Reduce the Standard Contract Term. Concurrent with this filing, we are making the following related filings:

1. Application for Approval of Solar Integration Charge;
2. Application for Change in Resource Sufficiency Determination; and
3. Motion for Temporary Stay of its Obligation to Enter into New Power Purchase Agreements with Qualifying Facilities.

A copy of this filing has been served on all parties to Docket UM 1610 via electronic mail as indicated on the attached certificate of service.

Please contact this office with any questions.

Very truly yours,

Wendy McIndoo
Office Manager

Enclosures
cc: UM 1610 Service List

CERTIFICATE OF SERVICE

I hereby certify that I served a true and correct copy of the foregoing document on the service list in Docket UM 1610 the following named person(s) on the date indicated below by email addressed to said person(s) at his or her last-known address(es) indicated below.

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DATED: April 24 2015



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1 **BEFORE THE PUBLIC UTILITY COMMISSION**
2 **OF OREGON**

3 **UM _____**

4
5 In the Matter of

6 IDAHO POWER COMPANY

7 Application to Lower Standard Contract
8 Eligibility Cap and to Reduce the
9 Standard Contract Term.

**APPLICATION TO LOWER STANDARD
CONTRACT ELIGIBILITY CAP AND TO
REDUCE THE STANDARD CONTRACT
TERM**

10 **I. INTRODUCTION**

11 Pursuant to OAR 860-001-0400(2) and ORS 758.535(2) Idaho Power Company
12 ("Idaho Power") respectfully requests that the Public Utility Commission of Oregon
13 ("Commission") issue an order modifying the terms and conditions under which Idaho
14 Power enters into power purchase agreements with Qualifying Facilities ("QFs") pursuant
15 to the Public Utility Regulatory Policies Act of 1978 ("PURPA"). Specifically, Idaho Power
16 requests that the Commission: (1) Reduce the eligibility cap applicable to standard
17 contracts to 100 kilowatts ("kW") for wind and solar QFs; and (2) Reduce the contract term
18 from 20 years to two years for all QF projects above 100 kW.

19 Idaho Power understands that the Commission has reaffirmed its decisions to set the
20 standard contract eligibility cap at 10 megawatts ("MW") and the contract term for all
21 resources at 20 years. However, since those decisions were issued, Idaho Power's
22 circumstances have changed significantly, requiring the Commission to revisit its earlier
23 conclusions—**as they apply to Idaho Power Company**. Specifically, since the issuance
24 of Order No. 14-058 in docket UM 1610, the PURPA generation on the Company's system
25 has nearly doubled. The Company has executed contracts for the purchase of 461 MW of
26

1 new QF solar generation, scheduled to come on-line in 2016¹. Sixty MW of the new QF
2 solar contracts are in Oregon. More importantly for this filing, the Company has an
3 additional 1,326 MW of solar capacity actively seeking PURPA contracts, 245 MW of
4 which are in Oregon. On April 8, 2015, one project developer made formal requests,
5 under the Company's Oregon Schedule 85 for standard QF contracts for 5 new QF solar
6 projects totaling 40 MW. When this new and expected solar generation is added to the
7 Company's wind (and other) QF generation on-line and under contract, Idaho Power's
8 total PURPA obligation will be over 2,400 MW, and its overall financial obligation under
9 PURPA will be close to \$6.5 billion over the life of the PURPA contracts. The level of
10 renewable development on Idaho Power's system would be enough to exceed the
11 renewable portfolio standards ("RPS") of California, Oregon, Nevada, Utah, Montana, and
12 Washington if all of the currently operating, under contract, and proposed QF projects
13 were operating on its system.²

14 Given these facts, the stakes are exceedingly high for Idaho Power's customers; it is
15 essential, on a going forward basis, that the price that the Company pays for PURPA

16

17 ¹ On April 6, 2015, four of these QF solar contracts (141 MW total) were terminated for the projects'
18 failure to post required Delay Security, which is a material breach of the agreements. This leaves
19 Idaho Power with 320 MW of QF solar projects currently under contract to come online in 2016, 60
20 MW of which are in Oregon.

21 ² Idaho Power/110, Allphin/1. The state of Idaho does not have an RPS, but with only its currently
22 existing resources the Company would meet an RPS standard of 20 percent of retail load
23 (megawatt-hour ("MWh")) supplied by renewable energy (MWh). When Idaho Power's 1,709 MW
24 of hydroelectric nameplate capacity is combined with the Company's acquired renewable capacity,
25 Idaho Power has over 3,100 MW of renewable generation capacity, which equates to 94 percent of
26 retail load supplied by renewable energy. If the Company's PURPA generation, including PURPA
solar under contract and proposed, were considered, Idaho Power would meet an RPS standard of
41 percent of retail load supplied by renewable generation, which exceeds the RPS requirements of
its neighboring western states, as well as California, as shown in Idaho Power/110, Allphin/1. This
comparison is done to show the magnitude of QF development and Company-owned hydro
compared to various mandatory RPS requirements. Because Idaho Power does not receive the
Renewable Energy Certificates/Credits ("RECs") from most of its QF generation, this generation
cannot be used to meet any potential RPS requirements. Idaho Power cannot represent to
customers that they are receiving renewable energy from the QFs, or from generation, for which it
does not receive the RECs, and is not making any such representation here.

1 generation is as close as possible to its **actual** avoided costs, and that the Company's
2 customers are not exposed to unnecessary and unneeded risk and additional costs for
3 adding generation that is not needed on the Company's system. The Idaho Public Utilities
4 Commission ("IPUC") has lowered the eligibility for standard contract rates for wind and
5 solar QFs to 100 kW,³ and has reduced the maximum contract term for all larger projects,
6 over the standard rate eligibility cap, to five years.⁴ These changes are applicable to
7 proposed QF projects in the Company's Idaho jurisdiction. However, Idaho Power has
8 been informed by several QF developers that they are likely to cross the border into
9 Oregon with additional proposed projects where they can obtain Oregon's long-term,
10 standard contract rates for projects that would exceed the standard rate cap in Idaho.
11 Based on these events, Idaho Power believes that a substantial amount of PURPA QF
12 development is poised to attempt to arbitrage the differences that exist with avoided cost
13 rates and PURPA implementation between the Company's Idaho and Oregon
14 jurisdictions—to the detriment and harm of the Company's customers and system.

15 As recognized by both the Federal Energy Regulatory Commission ("FERC") and
16 this Commission, standard rates represent only an approximation of a utility's actual
17 avoided costs because the standard rate does not take into account the QF's specific
18 project characteristics.⁵ In past orders the Commission has nevertheless set the threshold
19 for standard rates at the relatively high 10 MW level, in order to reduce transactional costs
20 for QFs and thereby encourage development under PURPA. Similarly, the Commission
21 has confirmed its commitment to relatively long, 20-year terms for PURPA contracts, in

22 _____

23 ³ IPUC Order No. 32262, Case No. GNR-E-11-01.

24 ⁴ IPUC Order No. 33222, and 33252, Case No. IPC-E-15-01.

25 ⁵ See *Re Investigation Relating to Electric Utility Purchases from Qualifying Facilities*, Docket UM
26 1129, Order No. 05-584 at 16 (May 13, 2005) Order No. 05-584; *Small Power Production and Cogeneration Facilities: Regulations Implementing Section 210 of the Public Utility Regulatory Policy Act of 1978*, Order No. 69, 45 Fed. Reg. 12,214 at 12,223 (1980) (hereinafter "Order No. 69").

1 order to encourage development. Current events, however, tip the balance of interests in
2 the other direction. Given the magnitude of the impact on Idaho Power's system, its
3 customers can no longer afford to pay more than the Company's actual avoided cost for
4 PURPA generation, and can no longer accept the financial risk imposed by 20-year
5 avoided cost estimates in PURPA contracts.

6 For these reasons, in view of Idaho Power's unique circumstances, the Commission
7 should alter its past policies, and—for Idaho Power only—allow for negotiated rates for
8 any solar or wind QF contract over 100 kW, and shorten the maximum required length of
9 PURPA contracts to two years for projects above 100 kW. This would align the applicable
10 avoided cost rates and maximum contract term across the Company's Idaho and Oregon
11 jurisdictions and prevent regulatory arbitrage to the detriment of customers.

12 Concurrent with this filing, the Company is filing an application to update its standard
13 avoided cost prices to reflect a change in the Company's capacity sufficiency
14 determination, and an application seeking approval of a solar integration charge for QF
15 solar projects, which are incorporated herein by this reference. Also, given the number of
16 QF projects currently seeking new contracts with Idaho Power in its Oregon jurisdiction,
17 the Company is filing a motion for a temporary stay of Idaho Power's obligation to enter
18 into fixed-price, standard PURPA contracts, pending resolution of these concurrent filings.
19 In the alternative, the Company's motion requests that the Commission grant the relief it
20 requests on an interim basis, pending ultimate resolution of these issues.

21 The Company notified Staff and the parties to docket UM 1610 of its intention to
22 make these PURPA filings. As reflected in the *Stipulation re: Issues List* filed on February
23 20, 2015, in docket UM 1610, Staff and the parties support the Company's decision to
24 raise these issues in an Idaho Power-specific proceeding, rather than in Phase II of the
25 generic PURPA investigation.

26

1 Accompanying this Application is the testimony of Randy Allphin, which summarizes
2 the development of PURPA QF generation on Idaho Power's system, the current status of
3 contracts, requests for contracts and interconnection, inquiries, pricing requests, and
4 similar issues related to PURPA energy sales agreements, obligations, and proposed QF
5 projects with Idaho Power. Mr. Allphin's testimony is submitted in support of the
6 Company's requests and presents several Exhibits with supporting information.

7 Communications regarding this Application should be addressed to:

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15 II. BACKGROUND

16 A. Idaho Power's QF Development is Rapidly Increasing.

17 It is no news to this Commission that the PURPA development on Idaho Power's
18 system has been robust. As described extensively in the record in docket UM 1610, Idaho
19 Power's QF development has been substantially greater than that of any other utility in the
20 region, both in absolute terms and relative to each utility's load.⁶ However, even in view of
21 this history, the rate of solar development over the past year has been unprecedented. In
22 addition to the 781 MW of PURPA generation currently operating on Idaho Power's
23 system, the Company has entered into contracts for an additional 461 MW of PURPA
24 solar generation (as well as an additional 50 MW of wind), which would result in a more
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26 ⁶ See *Investigation into Qualifying Facility Pricing and Contracts*, Docket UM 1610, Direct
Testimony of M. Mark Stokes (Feb. 4, 2013).

1 than 50 percent increase in PURPA generation on the system. Moreover, and more
2 importantly for this filing, the Company has 1,326 MW of PURPA solar capacity actively
3 seeking PURPA energy sales agreements and/or interconnection. When these projects
4 are added to the currently-operating projects, and those already under contract, the
5 Company will have increased its PURPA generation by almost 200 percent—to a total of
6 2,487 MW—in the space of just three years. And while future rates of development are
7 admittedly unpredictable, there is no reason to believe that current trends will slow down
8 any time soon. In fact, subsequent to PURPA regulatory changes implemented by the
9 IPUC, Idaho Power has seen a dramatic rise in proposed new Oregon QF projects. For
10 these reasons, it is essential that the price the Company pays for any new PURPA
11 contracts is as close as possible to actual avoided costs, and that the Company obtains
12 some alignment of PURPA implementation across its Idaho and Oregon service territory.

13 The rapid pace and trajectory of the Company's PURPA development is shown on
14 the graph in Idaho Power/101, Allphin1.

15 **B. Idaho Power's QF Development has Significant Costs that are Passed on to**
16 **Customers.**

17 Idaho Power's obligations under its existing PURPA contracts are significant. The
18 customer obligation for the 781 MW already operating is approximately \$2.6 billion over
19 the life of the respective agreements. The additional 320 MW of approved solar QF
20 contracts represents an additional financial obligation to be borne by customers of
21 approximately \$1.2 billion. And, assuming it is all developed, the 1,326 MW of proposed
22 solar QF projects would represent yet another long-term financial obligation to customers
23 of approximately \$2.7 billion. Moreover, this rapidly increasing trend shows no sign of
24 slowing. As shown in Idaho Power/102, Allphin/1, in 2004 Idaho Power's PURPA
25 obligation totaled approximately \$40 million. Just five years later, in 2009, the annual
26 power supply expense associated with PURPA grew by 50 percent to approximately \$60

1 million. As more wind was coming onto the system at a rapid pace, just three years later,
2 in 2012, annual PURPA power supply expense almost doubled, to nearly \$120 million,
3 and eventually leveled off for a few years at just under \$150 million. With the rapid
4 addition of the recent PURPA solar contracts, which are contracted to come on-line by the
5 end of 2016, by 2018, PURPA annual power supply expense is estimated to increase to
6 just below \$185 million and increase to just under \$204 million by 2025. This forecast
7 represents a staggering 410 percent increase in annual PURPA power supply expense in
8 approximately 20 years. Significantly, this growth trend continues during a time when
9 Idaho Power has no need for new generation resources identified by its Integrated
10 Resource Plan ("IRP").

11 More importantly, all of this PURPA generation comes at a steep price for Idaho
12 Power's customers when compared to any other available generation source on the
13 Company's system. As shown in Idaho Power/103, Allphin/1, the Company's average
14 cost of PURPA generation included in base rates is \$62.49/MWh, compared with an
15 average cost of coal at \$22.79 per MWh, gas at \$33.57 per MWh, non-PURPA market
16 purchases of \$50.64 per MWh, and Idaho Power's surplus sales at \$22.41 per MWh.
17 Moreover, Idaho Power's avoided cost, established through the methodologies approved
18 by the Commission, has historically exceeded market price, and it is projected that it will
19 always exceed market price into the future as shown in the graph below.⁷

20

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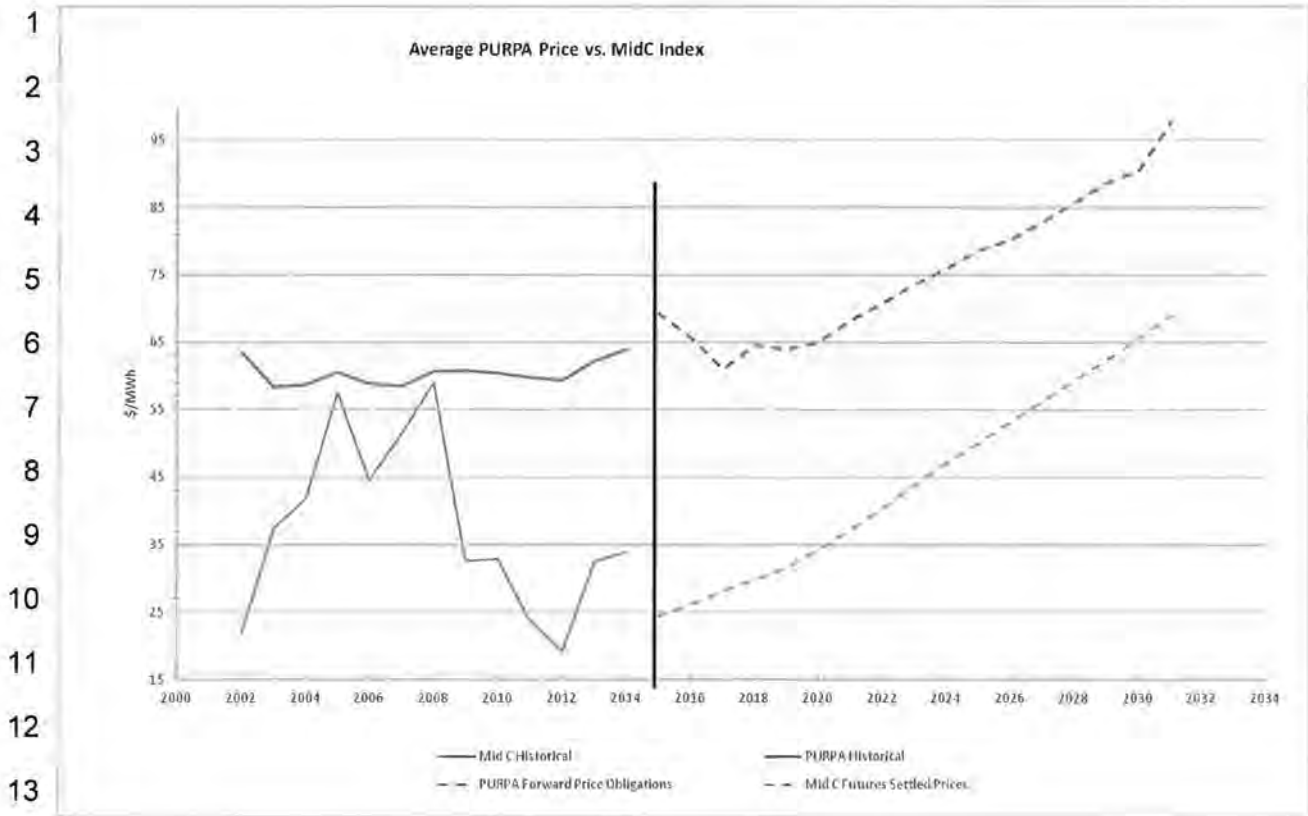
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26 ⁷ Idaho Power/104, Allphin/1.



III. ARGUMENT

A. Idaho Power's Request to Lower the Eligibility Cap.

1. Lowering the Eligibility Cap Will Result in a More Accurate Avoided Cost Calculation for Wind and Solar QFs.

The avoided cost requirement is intended to ensure that a utility's customers remain indifferent to the purchase of QF power and that QFs are not subsidized at ratepayers' expense.⁸ As FERC explained:

⁸ *Independent Energy Producers Association v. California Public Utilities Comm'n*, 36 F.3d 848, 858 (9th Cir. 1994) ("If purchase rates are set at the utility's avoided cost, consumers are not forced to subsidize QFs because they are paying the same amount they would have paid if the utility had generated energy itself or purchased energy elsewhere."); see *So. Cal. Ed. Co.*, 71 F.E.R.C. ¶ 61,269, 62,080 (F.E.R.C. 1995) ("The intention [of PURPA] was to make ratepayers indifferent as to whether the utility used more traditional sources of power or the newly-encouraged alternatives.").

1 PURPA requires an electric utility to purchase power from a
2 QF, but only if the QF sells at a price no higher than the cost
3 the utility would have incurred for the power if it had not
purchased the QF's energy and/or capacity, i.e. would have
generated itself or purchased from another source.⁹

4 To implement PURPA, FERC adopted regulations reiterating the avoided cost
5 requirement. Section 292.304(2) of FERC's regulations, codified as 18 C.F.R. §
6 292.304(2), states unequivocally that "[n]othing in this subpart requires any electric utility
7 to pay more than the avoided costs for purchases." When FERC's rules were challenged,
8 the United States Supreme Court upheld the rules concluding that PURPA "sets full
9 avoided cost as the *maximum* rate that [FERC] may prescribe."¹⁰

10 Similarly, ORS 758.525 requires utilities to purchase QF energy and capacity at no
11 "less than the utility's avoided costs." The Commission has consistently noted that one of
12 its fundamental objectives under PURPA is to accurately price QF power to ensure that
13 customers remain indifferent to QF generation.¹¹ The Commission has emphasized that it
14 "consistently interpreted its PURPA mandate to be the adoption of policies and rules that
15 promote QF development, using among other tactics, accurate price signals and full
16 information to developers, while ensuring that utilities pay no more than avoided costs."¹²

17 Both FERC and the Commission have recognized that standard rates are an
18 approximation of a utility's actual avoided costs because the standard rate does not take
19

20

21 ⁹ *So. Cal. Ed. Co.*, 71 F.E.R.C. ¶ 61,269, 62,079 (F.E.R.C. 1995).

22 ¹⁰ *American Paper Institute, Inc. v. American Elec. Power Service Corp.*, 461 U.S. 402, 413 (1983)
(emphasis added).

23 ¹¹ Order No. 05-584 at 11 ("We seek to provide maximum incentives for the development of QFs of
24 all sizes, while ensuring that ratepayers remain indifferent to QF power by having utilities pay no
25 more than their avoided costs.") and 19 ("A primary goal in this proceeding is to accurately price QF
power."); *Re Investigation into Electric Utility Tariffs for Cogeneration and Small Power Production*
Facilities, Docket R-58, Order No. 81-319 at 3 (May 6, 1981); Order No. 14-058 at 3.

26 ¹² *Re Investigation into Qualifying Facility Contracting and Pricing*, Docket UM 1610, Order No. 14-
058 at 3 (Feb. 24, 2014) (quoting Order No. 05-584).

1 into account the QF's specific project characteristics.¹³ For example, standard QF
2 contracts require Idaho Power to take all energy the QF project delivers at any time of the
3 year or day, at a specified price. As a result, it is not unusual for Idaho Power to be
4 required to back down less expensive generation resources to accommodate the QF
5 deliveries; alternately the QF generation must be sold into the market, which can occur at
6 a loss if the standard rate is greater than market prices at the time of the sale. Both of
7 these options result in additional costs that are passed on to utility customers.

8 Moreover, QF generation can result in over-generation events that impose additional
9 costs on Idaho Power and present significant reliability concerns. The costs of the
10 remedial actions necessary to address these over-generation events are also not
11 accounted for in standard rates. Total load on Idaho Power's system varies from a
12 minimum of approximately 1,100 MW to a maximum of approximately 3,400 MW
13 throughout the year.¹⁴ The Company's peak load for its Oregon jurisdiction during 2014
14 was 110 MW. The Company currently integrates 781 MW of PURPA generation, and 136
15 MW of non-PURPA renewable generation, of which 678 is intermittent wind generation.¹⁵
16 The currently proposed QF solar generation is in excess of another additional 1,600 MW
17 of intermittent generation at a time when the Company needs no new generation what-so-
18 ever in order to meet its obligation to serve in the public interest.¹⁶

19 PURPA's mandatory purchase obligation, which applies even when no new
20 generation is needed to serve load, results insignificant over-generation on Idaho Power's
21 system. As shown in Idaho Power/107, Allphin/1-25, without considering any generation
22 from the Company's gas-fired generation or must-take PURPA purchases, and

23 ¹³ See Order No. 05-584 at 16; Order No. 69 at 12,223.

24 ¹⁴ Actual numbers for 2014 were approximately 1,073 MW minimum and 3,184 MW peak.

25 ¹⁵ Idaho Power/105, Allphin/1-9.

26 ¹⁶ Idaho Power/106, Allphin/1-2. 1,326 MW of proposed QF solar generation plus 320 MW of QF solar generation currently under contract.

1 considering only the generation provided by the minimum, must-take levels of coal and
2 hydro generation, the Company's generation will exceed 2016 and 2017 projected load for
3 14 percent of all hours during 2016 and 2017. Inclusion of the proposed PURPA
4 generation results in over-generation on Idaho Power's system for 42 percent of all hours
5 during 2016 and 2017, considering only minimum levels of must-take and must-run
6 generation resources.

7 Standard rates also do not consider the dispatchability (or lack thereof) of a QF
8 resource. For Idaho Power this is a particular concern because the proxy resource used
9 to calculate its standard rates is a natural gas-fired combined cycle combustion turbine
10 ("CCCT"). However, if Idaho Power owned and operated a CCCT, it would operate the
11 plant only when economic to do so. If market prices were less than the cost to operate the
12 CCCT, Idaho Power would look to the market for energy purchases. And the CCCT would
13 be run only when Idaho Power's load required. These facts are not captured in the
14 methodology used to calculate standard rates, which assumes that Idaho Power would
15 operate the CCCT whenever the QF is generating, regardless of contemporaneous market
16 prices or existing load.

17 Finally, the aggregate impact of QFs on the utility's system is also not accounted for
18 in the standard rates, which is contrary to FERC regulations. Specifically, in 18 C.F.R. §
19 292.304(e)(2)(vi), FERC directed state commissions to consider in their calculation of the
20 avoided cost prices, to the extent practicable, the aggregate value of the energy and
21 capacity from all QFs on the utility's system. This failure to account for aggregate impact
22 is significant given the amount of QF energy the Company is facing.

23 Lowering the eligibility cap would require all QF wind and solar projects greater than
24 100 kW to negotiate pricing using the incremental cost IRP methodology, ensuring that the
25 avoided cost price paid by the Company and its customers is specifically tailored to the
26 QF's unique operational characteristics and the impact of the QF on Idaho Power's

1 system. Thus, the Company's requested relief will result in a more accurate avoided cost
2 price because the rate will specifically consider the individual QF's specific generation
3 profile and the cost of the Company's displaceable resources. These are factors that state
4 regulatory commissions must take into account, to the extent practicable, when
5 determining the avoided cost of a utility.¹⁷ Moreover, consideration of these factors would
6 align the rate methodology in Oregon to that used for all wind and solar purchases in the
7 Company's Idaho jurisdiction and prevent developers from moving across state lines to
8 receive higher rates.

9 **2. QF Development since the Commission Retained the 10 MW Eligibility**
10 **Cap in Docket UM 1610 Indicates that a Lower Cap is Not Necessary to**
Promote the Development QF Projects.

11 In Order No. 14-058 the Commission retained the 10 MW eligibility cap for all types
12 of QF resources. In so doing, the Commission affirmed its prior conclusions that the 10
13 MW eligibility cap is "intended to address the challenges smaller QFs face in entering our
14 market, including the transaction costs incurred in negotiating an agreement, and other
15 market barriers such as asymmetric information and an unlevel playing field."¹⁸ The
16 Commission found that the evidence in docket UM 1610 indicated that a lower eligibility
17 cap would "deter QF development in Oregon, largely because of the increased transaction
18 costs incurred when negotiating a contract."¹⁹ However, recent QF development in the
19 Company's Idaho jurisdiction demonstrates that a lower eligibility cap is not a deterrent to
20 QF development, especially QF solar development.

21 In 2011 the IPUC lowered the eligibility cap for standard contracts for wind and solar
22 QFs from 10 aMW to 100 kW. Since the eligibility cap was lowered, Idaho Power has
23 successfully negotiated 19 separate contracts in Idaho for a total of 401 MW of QF

24 ¹⁷ See 18 C.F.R. § 292.304(e).

25 ¹⁸ Order No. 14-058 at 7.

26 ¹⁹ Order No. 14-058 at 7.

1 generation in Idaho, and has current requests from an additional 47 proposed projects for
2 a total of 1,081 MW of additional QF solar generation, all with the applicability of a 100 kW
3 standard rate eligibility cap. The Company's robust solar QF development in Idaho
4 demonstrates clearly that QF development is not impeded by the need to negotiate
5 contracts, and can actually thrive with a 100 kW cap in place.

6 **3. The Changes in Avoided Cost Methodology Resulting from Order No. 14-**
7 **058 do not Sufficiently Mitigate the Impact of a 10 MW Eligibility Cap.**

8 When reaffirming the 10 MW eligibility cap in Order No. 14-058, the Commission
9 acknowledged the utilities' concern that standard contract prices may result in inflated
10 avoided cost prices.²⁰ The Commission concluded, however, that this issue was "best
11 addressed through our decisions to require annual updates to avoided costs."²¹ The
12 Commission also observed that it addressed ways to incorporate wind integration costs
13 and resource capacity contributions into standard avoided cost prices.²² It is true that the
14 Commission's modifications to the avoided cost pricing and updating will lessen the
15 potential customer harm resulting from excessive avoided cost prices. However, despite
16 the incremental changes adopted in docket UM 1610, the Company's avoided cost prices
17 are still excessive and the changes are insufficient to fully address the Company's
18 concerns.

19 The Company's current standard avoided cost price in Oregon for a solar resource
20 coming online at the end of 2016—after implementing the Commission's changes in Order
21 No. 14-058—is approximately \$75.95 per MWh. In Idaho, however, the Company has
22 successfully negotiated solar QF contract prices ranging from approximately \$62 to \$73
23 per MWh, which is \$3 to \$14 per MWh less than the Company's current Oregon avoided
24

25 ²⁰ Order No. 14-058 at 7.

26 ²¹ Order No. 14-058 at 7.

²² Order No. 14-058 at 7.

1 cost prices. Currently, the average indicative price for a new QF solar project in Idaho is
2 approximately \$46 per MWh—which is \$29 less than the standard contract rate in Oregon.
3 The negotiated contract prices in Idaho provide concrete evidence that Oregon's standard
4 prices remain excessive and unnecessary to encourage QF development. Continued use
5 of a 10 MW eligibility cap will therefore produce real, material harm to customers who will
6 be unnecessarily paying inflated avoided cost prices.

7 Concurrent with this filing, the Company is also requesting that the Commission
8 approve an integration charge for solar QFs and that the Commission modify the
9 Company's sufficiency period to reflect the fact that the Company is currently capacity
10 sufficient through 2021. The Commission's approval of both these changes will further
11 mitigate the customer harm arising from a 10 MW eligibility cap. The Company's
12 experience in Idaho, where negotiated solar contracts include an integration charge and
13 correctly reflect Idaho Power's capacity sufficiency, demonstrates that these modifications,
14 in combination with a lower eligibility cap do not discourage QF development.

15 **4. Lowering the Eligibility Cap will Result in Economically Efficient QF**
16 **Development in Oregon and Will Prevent Regulatory Arbitrage.**

17 In Order No. 14-058, the Commission reiterated its prior policy to implement PURPA
18 "in a manner that encourages the *economically efficient* development of [QFs] in
19 Oregon."²³ Idaho Power's experience in Oregon, however, demonstrates that the
20 Commission's 10 MW eligibility cap results in economically *inefficient* QF development.
21 With the exception of Idaho Power's one previously existing 3 MW wind QF, all of Idaho
22 Power's Oregon wind and solar QFs are disaggregated projects that are designed and
23 constructed to allow access to the higher standard avoided cost prices. Indeed, all of the
24 Company's existing wind and solar QFs in Oregon are sized at 10 MW and all of the
25

26 ²³ Order No. 14-058 at 3 (emphasis added).

1 Company's proposed solar QFs in Oregon are sized at 10 MW. Disaggregation is
2 apparent given the pattern of development with the 50 MW of wind and 60 MW of solar
3 currently under contract, as well as the additional 245 MW²⁴ proposed for development in
4 Oregon, all of which are at 10 MW increments, or smaller.

5 Prior to the Idaho Commission's reduction of the standard rate eligibility cap for wind
6 and solar to 100 kW, Idaho Power saw similar disaggregation of the QF wind projects that
7 developed on its system in Idaho. Of the 25 Idaho Power wind QF projects located in
8 Idaho, only one project negotiated a contract as an 80 MW project. The other 24 projects,
9 comprising approximately 485 MW, are located at essentially two different geographic
10 locations; these projects visually appear to be two large projects, many sharing common
11 interconnection points, yet contractually having 24 separate QF contracts, separated out
12 into 10 aMW increments in order to obtain the higher standard avoided cost rates. The
13 five, 10 MW Oregon wind projects under contract that are yet to be constructed are
14 proposed by one developer, but with unique ownership arrangements specifically
15 designed to qualify as separate 10 MW projects in order to obtain standard rates.

16 By comparison, as discussed above, in Idaho, after the reduction in the standard rate
17 eligibility cap to 100 kW for wind and solar QFs, where the eligibility cap has no impact on
18 the design of the project, QFs are typically much larger. Indeed, the proposed QF solar
19 projects in Idaho range from 20 MW to 80 MW with several projects at 20 MW and others
20 sized at 30 MW, 40 MW, and 80 MW. The larger project sizes in Idaho result in more
21 efficient project siting, interconnection, and network upgrades. The difference in the sizes
22 of the projects in Oregon and Idaho suggests that access to higher standard avoided cost
23 prices, rather than economic efficiency, is driving QF development in Oregon, and is the
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²⁴ Idaho Power/106, Allphin/1-2

1 result of project developers gaming the system to the detriment of customers rather than
2 making development decisions based upon economic and operational efficiency.

3 Lowering the eligibility cap for wind and solar QFs in Oregon will also align the
4 avoided cost prices between Oregon and Idaho and reduce the incentive for regulatory
5 arbitrage. Given the current disparity in the avoided cost prices, the Company is
6 concerned that the rapid QF development that has occurred recently in Idaho will move to
7 Oregon to take advantage of the higher prices. Adopting a consistent eligibility cap will
8 greatly reduce the incentive for QFs to game the system to take advantage of more
9 advantageous contracting and pricing in Oregon.

10 **B. Idaho Power's Request to Shorten the Contract Term.**

11 The Company requests that the current 20-year contract length be reduced to two
12 years for projects that exceed 100 kW. Although the Company presented evidence and
13 argument seeking a shortened contract term in Phase I of UM 1610, the Commission's
14 order did not specifically mention contract term or otherwise address the issue and thus
15 the maximum authorized contract term remains unchanged. The Commission has
16 traditionally adopted a standard contract term that attempts to balance the "primary goal"
17 of "accurately pricing QF power" with the goal to "ensure that the terms of the standard
18 contract facilitate appropriate financing for a QF project."²⁵ The Commission has
19 authorized five year maximum term contracts in the past. In docket UM 1129 the
20 Commission increased the standard contract term from five to 20 years, with fixed prices
21 for the first 15 years.²⁶ The Commission also approved a stipulation that allowed a QF
22 negotiating a PURPA contract to elect a 20-year contract.²⁷

24 ²⁵ Order No. 05-584 at 19.

25 ²⁶ Order No. 05-584 at 20.

26 ²⁷ *Re Investigation Relating to Electric Utility Purchases from Qualifying Facilities*, Docket UM 1129, Order No. 07-360 at 11-12 (Aug. 20, 2007).

1 **1. Long-Term Contracts Pose Serious Price Risks to Customers.**

2 The continued and unchecked addition of extremely large amounts of intermittent
3 wind and solar QF generation onto Idaho Power's system at long-term, fixed-prices when
4 the Company has no need for the additional generation unnecessarily increases customer
5 cost and risk. Indeed, the Company is capacity sufficient through 2021, and energy
6 sufficient beyond the next 20 years. Nevertheless, the Company is required to enter into
7 long-term, fixed price contracts with QFs without any reference to the Company's need for
8 the resource. This requirement is inconsistent with the requirements for acquisition of
9 non-PURPA generation resources. The Commission has repeatedly noted the risk of
10 customer harm related to long-term fixed price contracts.²⁸ This risk is amplified when the
11 volume of PURPA contracts is as great as Idaho Power's.

12 Moreover, accurate avoided cost pricing does not sufficiently mitigate this risk.
13 Regardless of the methodology that is used to estimate Idaho Power's avoided cost, it
14 remains an estimate that will vary from actual costs.²⁹ Indeed, at a time of unprecedented
15 changes in the technological, economic, and regulatory landscapes faced by the electric
16 industry today, accurately forecasting future power costs is more difficult than ever. This
17 fact, in and of itself, demonstrates why the risk and potential harm increases the longer the
18 price estimates are locked in. The risk is compounded by federal constraints that prevent
19 any update, change, or modification to the contractual rates, once locked in for the full
20 term of the contract.³⁰

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24 ²⁸ Order No. 05-584 at 20; Order No. 07-360 at 11; Order No. 91-1383 at 14.

25 ²⁹ Order No. 05-584 at 20.

26 ³⁰ See e.g. *Freehold Cogen. Assoc., L.P. v. Bd. of Reg. Comm'rs of New Jersey*, 44 F.3d 1178,
1192 (3d Cir. 1995).

1 While the price risk can theoretically benefit customers, *e.g.*, when the PURPA
2 contract price is less than market, such a scenario is not expected to occur for the
3 foreseeable future and such a scenario has not occurred historically.

4 **2. Long-Term PURPA Contracts Lack the Customer Safeguards Included in**
5 **Idaho Power's Resource Planning and Other Market Purchases.**

6 Oregon's system of regulation, as it pertains here to the utility acquisition of
7 generation resources, is being undermined by PURPA. There is a fundamental
8 disconnection between the way a regulated monopoly service provider, like Idaho Power,
9 must plan for and acquire generation resources and the PURPA mandatory purchase
10 requirement. The major gap between these two regulatory processes and requirements is
11 the determination of need.

12 As a regulated utility providing retail electric service to consumers in the states of
13 Idaho and Oregon, Idaho Power has strict requirements it must meet in order to acquire
14 generation resources, which are established and overseen by the state commissions. In
15 order to acquire generation resources Idaho Power either (1) builds a generation resource
16 that it owns and operates for the benefit of its customers or (2) purchases generation
17 through a bilateral contract with another entity, makes a market purchase, or makes
18 mandatory PURPA QF purchases.

19 Under the Commission's requirements, Idaho Power's acquisition of utility-owned
20 generation starts with the IRP process. The IRP must identify a need for a generation
21 resource, and further identify the proper resource to meet that need in the least cost, most
22 reliable manner, given the known environmental, operational, and other constraints. If the
23 resource satisfies the Commission's definition of a major resource, the utility would
24 conduct a request for proposals ("RFP") and a competitive bidding process to select the
25 most appropriate resource to bring to the Commission for approval. In order to construct
26 new generation resources, the Idaho Power must obtain a Certificate of Public

1 Convenience and Necessity ("CPCN") from the IPUC for that resource.³¹ Beyond the
2 Commission's required public and regulatory processes associated with the IRP, the
3 CPCN process subjects the decision to acquire that resource to additional state
4 commission and public scrutiny, and assures that the utility acquires only those resources
5 that serve a need in the least cost, most reliable manner available, and that acquisition of
6 that resource is in the public interest. Additionally, should a proposed resource make it
7 through the IRP, RFP, and CPCN processes, there are additional Commission
8 proceedings required to include the cost of that resource into rates and establish how
9 those costs will be passed on to customers. The IRP is filed with and reviewed by the
10 Commission every two years, and updated annually. Changes in conditions, positions,
11 market prices, gas forecasts, load forecasts, and other relevant factors, are incorporated
12 and captured continually as they occur during the continuous development of the IRP and
13 its biennial filing.

14 With regard to market purchases, or any other energy market transactions of
15 purchases and sales that the Company conducts, Idaho Power must comply with its
16 Commission-approved risk management policy. The Company's risk management policy
17 limits market transactions to 18 months in order to mitigate customer exposure to market
18 fluctuations when the Company makes power purchases and sales on the market. If the
19 Company wished to transact for any periods greater than years, specific Commission
20 authorization and approval is required. This policy has been deemed a prudent process
21 for managing customer exposure to the market and transactional risk when making
22 generation purchases and sales, and the prudent term is far less than the 15 and 20 years
23 terms built into mandatory, unchangeable PURPA purchases.

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³¹ *Idaho Code* § 61-526

1 In stark contrast to the many Commission processes, proceedings, and protections
2 that are in place and required for the utility to construct, own, and operate a generation
3 resource for the benefit of its customers, the PURPA transaction has none. The only
4 requirement in the mandatory PURPA purchase of generation is that Idaho Power is a
5 regulated public utility providing retail service to customers and the other party is a
6 PURPA QF. If so, and regardless of whether the resource is needed or not, the utility
7 must purchase the generation. PURPA contains no guidance and no limitations as to
8 whether or not the utility actually needs the QF generation resource that it is required to
9 purchase. Similarly, PURPA contains no limit or cap on the amount of PURPA QF
10 generation that the utility must purchase under that mandatory obligation of PURPA.
11 These problems are amplified and exacerbated where the utility is required to purchase for
12 a long term with fixed rates.

13 Long-term resource acquisition is appropriately subject to extensive Commission and
14 public scrutiny through the Company's IRP process. The "primary goal" of IRPs is to
15 identify the resource acquisitions that will result in the least cost and least risk to
16 customers.³² To achieve this primary goal, the IRP includes both substantive and
17 procedural safeguards, including standards for resource and risk evaluation, significant
18 public involvement, an extensive Commission investigation, and annual updates.³³
19 Although the Commission has concluded that prudent management requires the "least-
20 cost planning process and the timely acquisition of the least-cost resources," by design,
21 PURPA resources are not subject to least-cost planning. The exclusion of PURPA
22 projects from the procedural and substantive safeguards provided by the IRP process is
23 particularly problematic when the Company is required to enter into 20-year contracts, with
24

25 ³² *Re Investigation into Integrated Resource Planning*, Docket UM 1056, Order No. 07-002 at 2
(Jan. 8, 2007).

26 ³³ See generally Order No. 07-002.

1 15-years of fixed prices that cannot be changed or updated based upon changed and
2 updated conditions such as those considered in the IRP.

3 Given the volume of PURPA transactions facing Idaho Power that are not subject to
4 customer safeguards, it is no longer reasonable to require long-term, fixed price contracts.
5 If the Company were to seek regulatory approval to construct 1,600 MW of solar
6 generation, the amount of QF solar under contract and proposed for Idaho Power's
7 system, the Company's request would be rejected because of the current resource
8 sufficiency and cost. Likewise, there is no justification for long-term PURPA contracts for
9 that generation. Idaho Power is required to meet customer needs with the least cost, most
10 reliable resource. Customer impacts are not held neutral when the standards for
11 acquisition of PURPA resources are not aligned with the standards for acquisition of all
12 other long-term resources. The authorized maximum term for PURPA energy sales
13 agreements with Idaho Power should be limited to two years, to better align with the
14 exposure of customers to risk that has been deemed prudent for the IRP process and the
15 Company's risk management policy.

16 **3. Shorter contract terms are consistent with other states and regions.**

17 The IPUC recently shortened Idaho Power's PURPA contract term to five-years
18 pending the investigation into whether the contract term should be permanently shortened
19 to two-years.³⁴ Similarly, Washington has PURPA standard contract terms that vary from
20 five to ten-years.³⁵ California still allows longer-term contracts, but the energy price in
21 standard offer contracts is now reset annually to minimize the risk to customers of long-
22 term fixed prices. Shortening Idaho Power's contract term to two-years would therefore be
23 consistent with the region's PURPA implementation plans.

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25 ³⁴ IPUC Order No. 33222, Case No. IPC-E-15-01 (Feb. 6, 2015).

26 ³⁵ See *WUTC v. PacifiCorp*, Docket UE-130043, Order 05 ¶ 106 (WUTC Dec. 4, 2013).

1 In PURPA exempt jurisdictions such as regional transmission organization ("RTOs")
2 where utilities are exempt from PURPA's mandatory purchase, QFs and other
3 independent power producers do not have access to 20-year, long-term, fixed-price
4 transactions. Idaho Power submitted sworn and cross-examined direct testimony in IPUC
5 Case No. GNR-E-11-03 regarding various implementations of PURPA throughout the
6 country, including discussion of alternative market-based avoided cost mechanisms and
7 available transactions in PURPA exempt jurisdictions. That testimony provides, "No RTO
8 requires any load serving entity to purchase energy bilaterally on a long-term basis and
9 the longest term for a guaranteed capacity price in any RTO is three years."³⁶

10 The Energy Policy Act of 2005 mandated that utilities in the
11 five original RTOs were eligible for exemption from PURPA
12 section 210 altogether. Hence, projects that previously would
13 have been QFs in those areas are dependent on either
14 bilateral contracts with utilities or the visible markets
15 conducted by the RTOs for revenue. Most such contracts are
16 short run in nature; state-supervised auctions typically are for
17 three years or less. RTO power markets are even shorter
18 term, with prices varying even within the hour and prices set at
19 most a day ahead. Capacity typically is bought on a monthly,
20 seasonal, or annual basis in those RTOs that have capacity
21 markets. Power markets are also used in several instances to
22 set avoided cost rates where the utility is not exempt.
23 California is one example. Energy prices for QFs except the
24 smallest ones are set based on one year forward market
25 prices.³⁷

19 That testimony also discusses how California revised its state PURPA implementation in
20 response to overwhelming amounts of proposed PURPA generation that exceeded 16,000
21 MW.³⁸ Energy payments during the term of QF contracts in California are reset annually,
22 rather than fixed in advance for the term of the contract.³⁹

24 ³⁶ IPUC Case No. IPC-E-11-03, Hieronymus, Direct at 56.

25 ³⁷ *Id.* at 83-84.

26 ³⁸ *Id.* at 72-83.

³⁹ *Id.* at 78-79.

1 When looking at the present amount of PURPA solar generation that has contracted
2 with or is seeking to contract with Idaho Power, the additional obligation, risk, and price
3 differential between a 20-year and a two-year fixed-price contract term is significant. The
4 320 MW of PURPA solar currently under contract has a 20-year obligation of
5 approximately \$1,182,000,000.⁴⁰ The same 320 MW of PURPA solar would have an
6 associated obligation passed on to customers if limited to a two-year term of
7 \$67,286,000.⁴¹ The 1,326 MW of proposed PURPA solar contains an estimated 20-year
8 obligation of approximately \$2,714,000,000, whereas the total obligation for the same
9 1,326 MW of proposed PURPA solar with a two-year term is approximately
10 \$144,567,000.⁴²

11 IV. CONCLUSION

12 For all of the reasons stated above, Idaho Power requests that the Commission
13 lower the standard contract eligibility cap to 100 kW for wind and solar QF contracts and
14 reduce the maximum term to two years for all QF projects over the standard rate eligibility
15 cap. These requests are specific to Idaho Power, and intended to align avoided cost rates

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25 ⁴⁰ Idaho Power/109, Allphin/1.

26 ⁴¹ Idaho Power/109, Allphin/1.

⁴² Idaho Power/106, Allphin/1-2; Idaho Power/108, Allphin/1

1 and PURPA implementation for Idaho Power across its Idaho and Oregon service territory
2 and balancing area authority.

3 Respectfully submitted this 24th day of April, 2015.

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BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON

UM _____

In the Matter of

IDAHO POWER COMPANY
Application to Lower Standard Contract
Eligibility Cap and to Reduce the
Standard Contract Term.

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IDAHO POWER COMPANY

DIRECT TESTIMONY

OF

RANDY ALLPHIN

April 24, 2015

1 **Q. Please state your name and business address.**

2 A. My name is Randy Allphin. My business address is 1221 West Idaho Street, Boise,
3 Idaho 83702.

4 **Q. By whom are you employed and in what capacity?**

5 A. I am employed by Idaho Power Company ("Idaho Power" or "Company") as the
6 Energy Contracts Coordinator Leader.

7 **Q. Please describe your educational background and work experience with Idaho**
8 **Power.**

9 A. I graduated in 1982 from Boise State University with a Bachelor of Business
10 Administration. In June 1982, I accepted a position as a Customer Service Specialist
11 with Idaho Power. In 1986, I accepted a position as an Operations Accountant in the
12 Operations and Fuels Management accounting group. My specific responsibilities
13 were accounting for and performing economic analyses of the Company's
14 agreements with Qualifying Facilities ("QF"), as well as fuels accounting and thermal
15 operations and maintenance accounting. In 1998, in addition to the responsibility of
16 performing the accounting and economic analysis of QF agreements, I was also
17 assigned the responsibility of administering all aspects of existing and new QF
18 agreements as the Cogeneration and Small Power Production ("CSPP") Contract
19 Administrator. In 2010, I was promoted to Senior Energy Contracts Administrator
20 and was assigned two direct reports to manage the large number of Idaho Power QF
21 and other renewable energy agreements. I have been involved with accounting,
22 economic analysis, contract administration, and contract negotiations of Idaho Power
23 QF and renewable energy agreements for approximately 30 years. In addition, I was
24 responsible for the initial implementation of Idaho Power's Oregon Solar Photovoltaic
25 Pilot Program and currently am assigned supervisory oversight of the administration
26 of that program.

1 **Q. What is the purpose of your testimony in this matter?**

2 A. The purpose of my testimony is to provide a summary of the development of Public
3 Utility Regulatory Policies Act of 1978 ("PURPA") QF generation projects on Idaho
4 Power's system and to summarize the current status of contracts, requests for
5 contracts, inquiries, pricing requests, etc., related to PURPA energy sales
6 agreements, obligations, and proposed QF projects with Idaho Power. My testimony
7 is submitted in support of Idaho Power's Application to Lower Standard Contract
8 Eligibility Cap and to Reduce the Standard Contract Term, as well as the
9 contemporaneously filed Motion for Temporary Stay of Idaho Power's Obligation to
10 Enter Into New Power Purchase Agreements with Qualifying Facilities, Application
11 for Change in Resource Sufficiency Determination, and Application for Approval of
12 Solar Integration Charges.

13 **Q. Have you prepared any exhibits?**

14 A. Yes. I am sponsoring 10 exhibits that were either prepared by me or prepared at my
15 direction.

16 **Q. Could you describe those exhibits?**

17 A. Yes. Idaho Power/101, Allphin/1 is a graphical depiction of the current and historical
18 energy sales agreements that Idaho Power has been required to enter into with QF
19 generation projects pursuant to PURPA. This graph identifies the amount, in
20 megawatts ("MW"), by year and by resource type of signed and approved energy
21 sales agreements with PURPA QFs. It also identifies current requests for contracts
22 from proposed PURPA solar QFs. This graph separately identifies the MW levels of
23 PURPA projects under contract and operational as of April 20, 2015 – 781 MW; the
24 additional PURPA solar projects that are under contract as of April 20, 2015, but not
25 yet operational – 320 MW; and the additional PURPA projects that as of April 20,
26 2015, have made requests for PURPA energy sales agreements and/or applied for

1 PURPA interconnections with Idaho Power – 1,326 MW. Idaho Power/101, Allphin/1
2 identifies the total amount of PURPA projects, 2,487 MW, that have formally
3 requested contracts or interconnection, are under contract, and are under contract
4 and operational.

5 **Q. Can you continue to describe your exhibits?**

6 A. Yes. Idaho Power/102, Allphin/1 shows the annual actual and forecasted PURPA
7 expense from 2004 through 2025, which increases from approximately \$40 million in
8 2004 to over \$200 million in 2025, representing an approximate 400 percent increase
9 over those 22 years.

10 Idaho Power/103, Allphin/1 shows the approved net power supply expense
11 included in Idaho Power's base rates on a normalized basis for 2010, 2012, and
12 2013.

13 **Q. What costs have been included in base rates for net power supply expenses**
14 **over those years?**

15 A. Idaho Power/103, Allphin/1 shows the major Federal Energy Regulatory Commission
16 ("FERC") accounts for net power supply expenses that have been included in base
17 rates since 2010. The major FERC accounts include Account 501, Coal; Account
18 547, Gas; Account 555, Purchases; and Account 447; Surplus Sales. Account 555,
19 Purchases, has been split into two separate line items, one for purchases that are
20 non-PURPA related and the other for purchases of PURPA generation.

21 **Q. What do these numbers reflect with regard to the relationship of purchases for**
22 **PURPA compared to the other cost components of net power supply expense?**

23 A. It has been suggested that even though PURPA generation may not be needed to
24 meet current customer load, it can be assumed that the excess generation could be
25 sold as surplus sales, and therefore benefit the customer by a reduction on net
26 power supply expense. Based upon the dollars included in base rates that are

1 reflected in Idaho Power/103, Allphin/1, this assumption would not be accurate. In
2 fact, even though net power supply expenses associated with the purchase of
3 PURPA have increased, surplus sales have decreased, both in volume and in
4 dollars. The gap between the cost per MWh of PURPA and the price for surplus
5 sales has widened, meaning that the average price included in base rates that the
6 Company must pay to purchase PURPA generation-- even though it is not needed to
7 meet load -- is greater than the price the Company could sell that same generation
8 on the market. Customers are adversely impacted by having to pay for generation
9 that is not needed to serve load while decreasing the amount of the surplus sales
10 credit offset.

11 **Q. Why have surplus sales decreased so much in recent years, both in terms of**
12 **dollars and volume?**

13 A. There are a number of possible reasons for the reduction in surplus sales. One
14 reason may be the increased amount of available generation in the Pacific
15 Northwest, much of it due to the increase in wind and solar generation. Another
16 major reason for the lower price of surplus sales may be the cost of gas, which has
17 decreased significantly over the past several years. The bottom line is that it may
18 not be prudent to lock in long-term pricing for generation at a time when overall costs
19 for technology and fuel are decreasing.

20 **Q. What is the relationship of the cost for PURPA generation compared to the**
21 **costs of the other components of net power supply expense?**

22 A. As shown in Idaho Power/103, Allphin/1, the cost of purchases of PURPA generation
23 contained in base rates, on a dollars per MWh basis, is now greater than all the other
24 cost components. At \$62.49 per MWh, the average cost of PURPA purchases is
25 greater than the average cost of coal at \$22.79 per MWh, greater than gas at \$33.57
26 per MWh, greater than non-PURPA purchases of \$50.64 per MWh, and significantly

1 greater than what is being sold as surplus sales at \$22.41 per MWh.

2 **Q. What is the implication of these pricing differences and the potential impact on**
3 **the Company's customers?**

4 A. If the Company is required to purchase PURPA generation when it is not needed, the
5 Company may be required to curtail other less expensive sources of generation or
6 market purchases in order to continue purchasing PURPA generation at a higher
7 cost. This would mean that the Company's overall net power supply expense, on a
8 dollars per MWh basis, would increase, adversely impacting the customer.

9 **Q. What is your next Exhibit?**

10 A. My next Exhibit is Idaho Power/104, Allphin/1 which is a graphical depiction of the
11 average actual per MWh cost of PURPA energy purchases and Mid-C market prices
12 through year-end 2014 and the same two values forecasted through 2030. This
13 depiction shows the historic and projected PURPA energy purchase price, which
14 always exceeds market price.

15 **Q. How many PURPA projects does Idaho Power have on its system?**

16 A. Idaho Power currently has 129 PURPA QF projects under contract with a capacity of
17 1,161 MW. Idaho Power/105, Allphin/1-9 lists of all the Company's active renewable
18 energy contracts as of April 17, 2015. Page 1 of Idaho Power/105, Allphin/1-9
19 summarizes the total number of and total MW of renewable energy contracts,
20 breaking those totals down by resource type and jurisdiction, showing which projects
21 are operational, and separately identifying PURPA QF projects and non-PURPA
22 projects. The remaining pages of Idaho Power/105, Allphin/1-9, pages 2 through 9,
23 provide the detail summarized on page 1. Each individual project is listed by project
24 number (which is an internal tracking number for Idaho Power) and identified by
25 resource type, project name, location by state and county, and the MW nameplate
26 capacity. The individual projects are grouped by resource type, with subtotals for the

1 number of individual projects and the total MW for each resource type.

2 **Q. Do you have any information concerning any additional PURPA QF projects**
3 **seeking to contract with, or obligate, Idaho Power to PURPA energy sales**
4 **agreements?**

5 A. Yes. Idaho Power/106, Allphin/1-2 shows each individual proposed PURPA QF
6 solar project that has submitted either a written request for indicative pricing from
7 Idaho Power for an energy sales agreement, or has made formal application for
8 interconnection to Idaho Power's system to connect as a PURPA project selling to
9 Idaho Power. There are 73 individual projects, for a total of 1,326 MW that have
10 submitted such requests. 26 of these projects, for 245 MW, are in the Company's
11 Oregon jurisdiction. Because the identity of the project developers and their specific
12 projects are not public record prior to such time as they have obtained an executed
13 contract that is filed with the commissions, the project developers' identities and
14 names of projects have been removed. However, because in almost all cases a
15 single developer has proposed several separate projects, a generic identifier; i.e.,
16 Developer A, Project A1, Project A2, etc., Developer B, Project B1, Project B2, etc.,
17 has been used. Idaho Power/106, Allphin/1-2 also shows each project's size in MW,
18 the project's requested contractual term, the location by state, the project's estimated
19 operation date, and the estimated 20-year and 2-year contractual obligation in
20 dollars.

21 **Q. Have you conducted, or directed, any analysis of Idaho Power's PURPA**
22 **generation?**

23 A. Yes. Using information from Idaho Power's Load Serving Operations Group, I have
24 prepared Idaho Power/107, Allphin/1-25. Idaho Power/107, Allphin/1-25 consists of
25 24 separate graphs, each of which depict the first week of each month for the years
26 2016 and 2017 and one summary page. These graphs depict an analysis conducted

1 by Idaho Power which compares estimated total system load, on an hourly basis,
2 over 2016 and 2017, to the Company's must-run resources, must-take PURPA
3 generation, and must-take non-PURPA power purchase agreements. The estimated
4 load is taken directly from the Company's operational forecast. The must-run
5 Company-owned resources are comprised of Idaho Power's hydro and coal
6 generation, and are represented at must-run minimum levels. This means that they
7 are taken down to minimum operational levels beyond which they cannot be further
8 backed without violating environmental regulations for hydro, and without being shut
9 down for coal. Must-take PURPA and non-PURPA purchases are taken from Idaho
10 Power forecasted generation from the various PURPA projects currently under
11 contract with Idaho Power. This forecast is a combination of historical generation
12 information from existing projects and project-provided estimated generation as
13 contained within the contracts. There is no gas, market purchases, market sales, or
14 other generation depicted on the graphs or analysis.

15 **Q. What is shown in this analysis?**

16 A. This analysis shows the frequency with which Idaho Power's system, when in a state
17 where it cannot be backed down any further, will have generation resources in
18 excess of its system load. This situation will put the system into an imbalanced,
19 over-generation state unless some remedial action is taken to balance the system. If
20 remedial actions are not available, or not employed in a timely manner, the Company
21 can have system reliability violations, events, and/or outages and damage. In fact,
22 over the last several years, reliability curtailments of PURPA generation have been
23 necessary in order to maintain the integrity of Idaho Power's system. For the period
24 from May 2011 through December 2014, the Company has had at least 15 reliability
25 events that resulted in wind generation output reductions in order to maintain the
26 reliable operation of the Company's electrical system. These curtailments, or

1 generation limitation set points, have been relatively infrequent, for relatively short
2 durations, and are removed as soon as possible once it can safely be done and
3 maintain a balanced system.

4 **Q. What is the frequency of hours, over the years 2016 and 2017, in which Idaho**
5 **Power's must-run and must-take resources exceed total system load?**

6 A. The summary page of Idaho Power/107, Allphin/1-25 shows the frequency of hours
7 in which must-run and must-take generation will exceed total system load, and is
8 broken out into four categories: (1) Idaho Power's Company-owned must-run hydro
9 and coal plus non-PURPA must-take power purchases, without the addition of any
10 PURPA generation – 2,481 hours, or 14 percent, of all 17,544 hours during 2016 and
11 2017; (2) everything included in category 1 plus all existing PURPA generation
12 (excluding solar) – 5,128 hours, or 29 percent, of all 17,544 hours during 2016 and
13 2017; (3) everything included in category 2 plus all PURPA under contract (including
14 PURPA solar under contract – 320 MW) – 5,503 hours, or 31 percent, of all 17,544
15 hours during 2016 and 2017; and last, (4) everything in category 3 plus the 1,326
16 MW of proposed PURPA solar – 7,432 hours, or 42 percent, of all 17,544 hours
17 during 2016 and 2017. Each one of these hours creates a potential over-generation
18 event where remedial action of some kind will be necessary to keep the system in
19 balance and meet the obligation to reliably serve customers.

20 **Q. Do you have other exhibits?**

21 A. Yes. Idaho Power/108, Allphin/1 shows the estimated contractual obligations of
22 Idaho Power's cogeneration and small power production QF contract obligations.
23 This exhibit is broken out by time period, by signed and proposed contracts, and by
24 resource type.

25 Idaho Power/109, Allphin/1 is similar to Idaho Power/106, Allphin/1-2, except
26 the information is for PURPA solar projects that are under contract as of April 22,

1 2015. Each project is listed individually by name. Idaho Power/109, Allphin/1 shows
2 each project's size in MW, the term of the contracts (which are all for 20 years), the
3 location by state, the scheduled operation date (which is 2016 for all projects), and
4 the estimated contractual obligation for both a 20-year term and 2-year term in
5 dollars.

6 **Q. Has Idaho Power performed any comparisons of its renewable generation to**
7 **the renewable portfolio standards of other states?**

8 A. Yes. Idaho Power/110, Allphin/1 is a chart that depicts a comparison of Idaho Power
9 renewable generation resources to the renewable portfolio standard ("RPS") or
10 renewable portfolio goal ("RPG") of Idaho Power's neighboring states of Montana,
11 Washington, Utah, Nevada, and Oregon – and to that of California.

12 **Q. Could you further describe what is shown in Idaho Power/110, Allphin/1?**

13 A. Yes. Idaho Power does not have any current requirements for an RPS or RPG in the
14 state of Idaho, but what is shown by Idaho Power/110, Allphin/1 is that with its
15 currently existing PURPA and utility renewable energy power purchase agreement
16 ("PPA") resources, the Company would meet a renewable energy standard of 20
17 percent of retail load (megawatt-hours ("MWh")) supplied by renewable energy
18 (MWh). Idaho Power/110, Allphin/1 also depicts an estimated renewable energy
19 level for Idaho Power, calculated as percent of retail load in MWh supplied by
20 renewable energy in MWh, for four additional scenarios: Idaho Power's actual
21 PURPA and utility renewable energy PPAs plus the 320 MW of PURPA solar under
22 contract – 22 percent; Idaho Power's actual PURPA and utility renewable energy
23 PPAs plus the 320 MW of PURPA solar under contract plus the 1,326 MW of
24 PURPA solar proposed – 41 percent; Idaho Power's actual PURPA and utility
25 renewable energy PPAs, 320 MW of PURPA solar under contract, plus Idaho
26 Power's Company-owned hydro generation – 75 percent, and, finally, Idaho Power's

1 actual PURPA and utility renewable energy PPAs, 320 MW of PURPA solar under
2 contract, 1,326 MW of PURPA solar proposed, plus all of Idaho Power's Company-
3 owned hydro generation – 94 percent. The latter two scenarios depict that if Idaho
4 Power's 1,709 MW of hydroelectric nameplate capacity were combined with the
5 Company's acquired renewable capacity, which would represent over 3,100 MW of
6 renewable generation capacity, it would equate to 94 percent of retail load supplied
7 by renewable energy. In fact, if the Company's PURPA generation only, including
8 PURPA solar under contract and proposed, were considered, Idaho Power would
9 exceed the RPS requirements of its neighboring western states, as well as
10 California, at 37 percent of retail load supplied by renewable energy.¹

11 **Q. Does this conclude your testimony?**

12 **A.** Yes.
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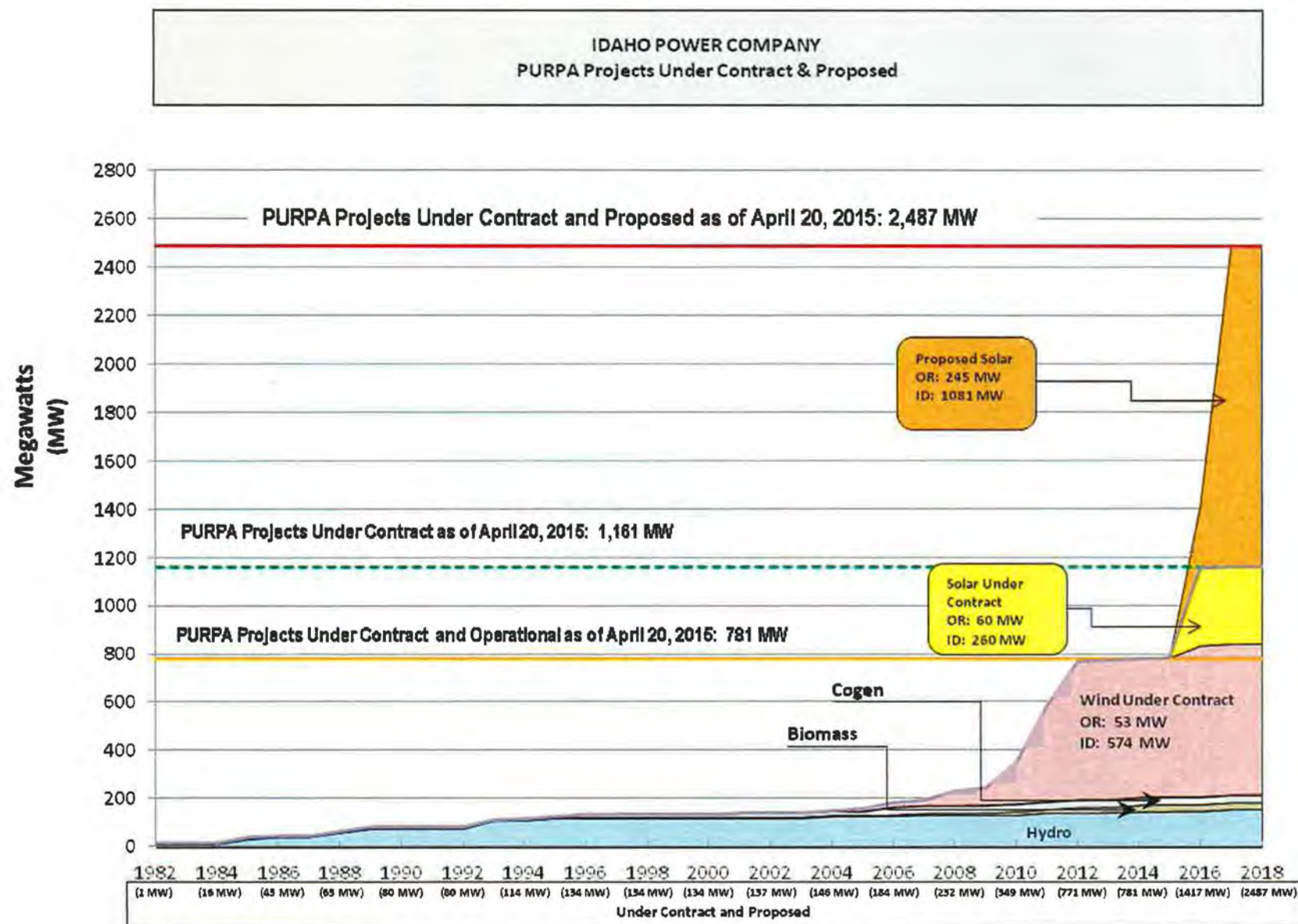
23 ¹ This comparison is done to show the magnitude of QF development and Company-owned
24 hydro compared to various mandatory RPS requirements. Because Idaho Power does not receive
25 the Renewable Energy Certificates/ Credits ("RECs") from most of its QF generation, this generation
26 cannot be used to meet any potential RPS requirements and Idaho Power cannot represent to
customers that they are receiving renewable energy from the QFs, or from generation, for which it
does not receive the RECs, and is not making any such representation here.

BEFORE THE PUBLIC UTILITY COMMISSION
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IDAHO POWER COMPANY

Exhibit Accompanying Direct Testimony of Randy Allphin

April 24, 2015



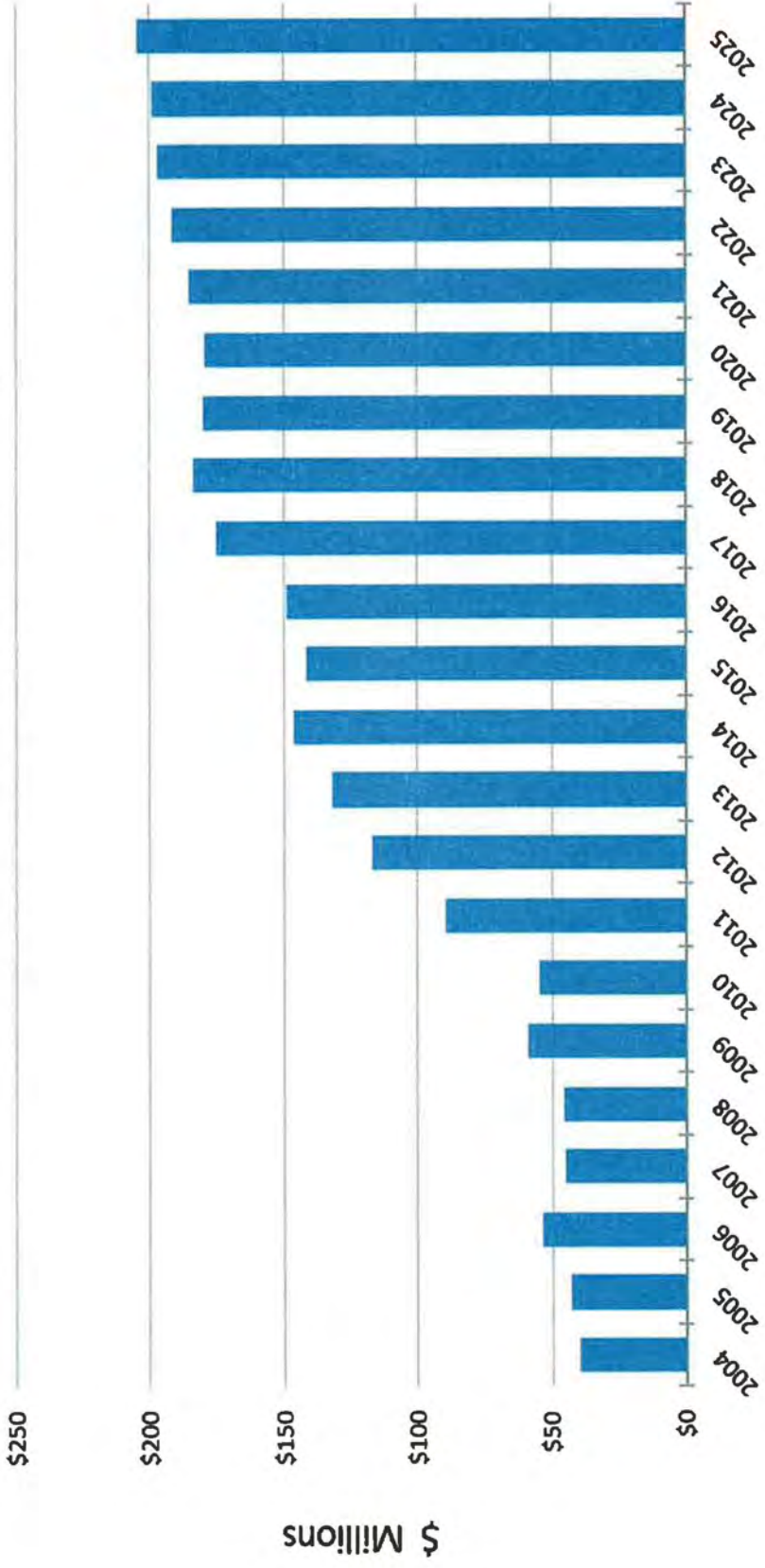
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April 24, 2015

Idaho Power PURPA Payments



BEFORE THE PUBLIC UTILITY COMMISSION
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Approved Net Power Supply Expense in Base Rates (Normalized)

2010

FERC Account	Expense	Energy	\$/MWh
Account 501, Coal	\$ 167,718,084	7,169,601.0	\$ 23.39
Account 547, Gas	\$ 6,062,472	42,552.4	\$ 142.47
Account 555, Purchases (Non-PURPA)	\$ 66,689,601	1,110,756.0	\$ 60.04
Account 555, Purchases (PURPA)	\$ 62,851,454	1,043,642.0	\$ 60.22
Account 447, Surplus Sales	\$ (92,642,114)	(2,755,646.4)	\$ 33.62

2012

FERC Account	Expense	Energy	\$/MWh
Account 501, Coal	\$ 167,192,744	7,145,609.2	\$ 23.40
Account 547, Gas	\$ 51,934,201	1,176,351.8	\$ 44.15
Account 555, Purchases (Non-PURPA)	\$ 45,510,093	763,793.1	\$ 59.58
Account 555, Purchases (PURPA)	\$ 62,851,454	1,043,642.0	\$ 60.22
Account 447, Surplus Sales	\$ (124,916,153)	(3,518,491.2)	\$ 35.50

2013

FERC Account	Expense	Energy	\$/MWh
Account 501, Coal	\$ 108,503,180	4,759,957.7	\$ 22.79
Account 547, Gas	\$ 33,367,563	993,970.8	\$ 33.57
Account 555, Purchases (Non-PURPA)	\$ 62,606,593	1,236,373.4	\$ 50.64
Account 555, Purchases (PURPA)	\$ 133,853,869	2,141,849.4	\$ 62.49
Account 447, Surplus Sales	\$ (51,735,153)	(2,309,046.6)	\$ 22.41

Note: Account 547, Gas \$/MWh include total variable expense plus all fixed expenses

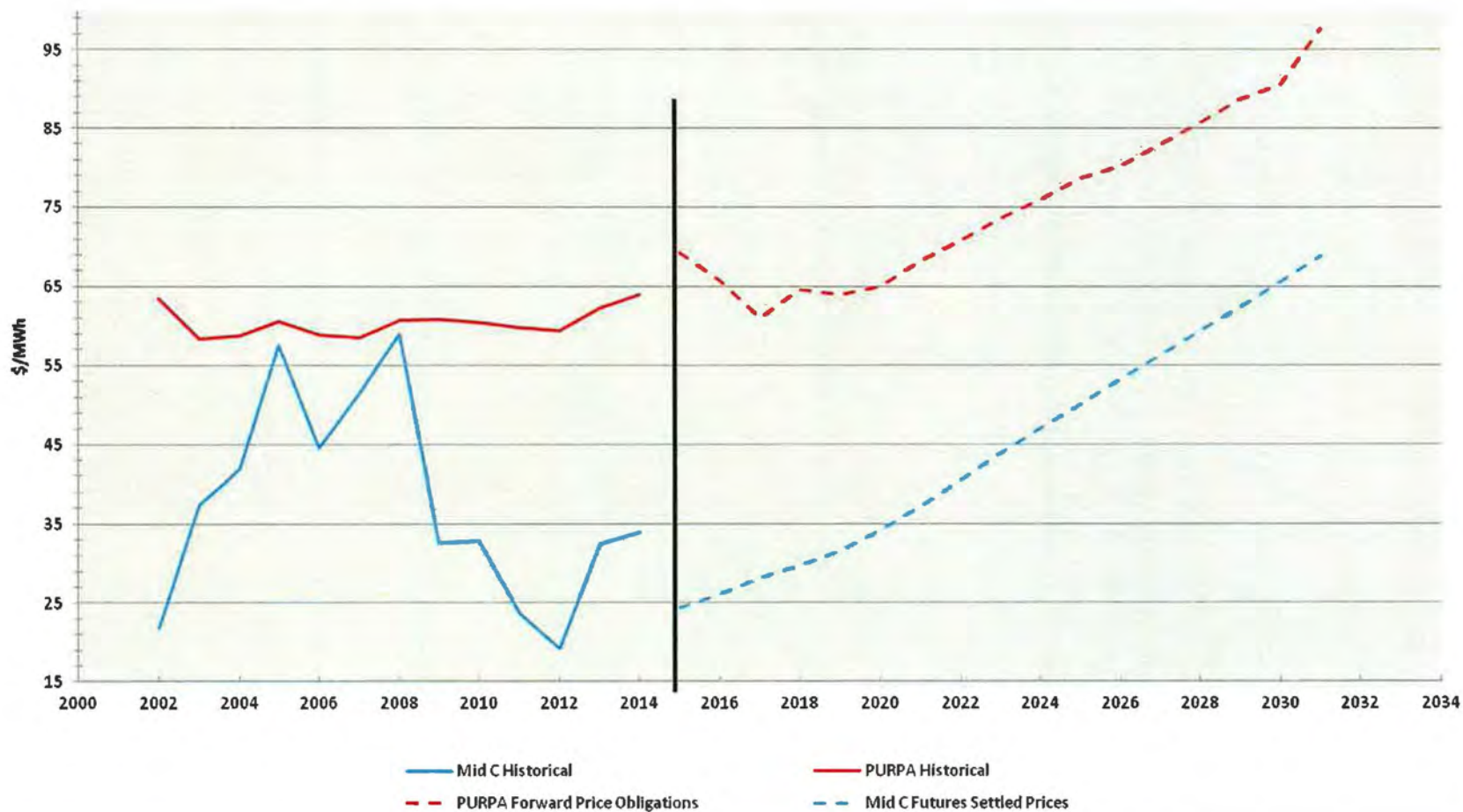
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April 24, 2015

Average PURPA Price vs. MidC Index



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IDAHO POWER COMPANY

Exhibit Accompanying Direct Testimony of Randy Allphin

April 24, 2015

**Idaho Power Company
Renewable Energy Contracts List
as of 4/17/2015**

SUMMARY

PURPA Projects	129	1,161.08 MW
OregonSolar Projects	60	0.46 MW
Non PURPA Projects	3	135.65 MW
	192	1,297.19 MW

SUMMARY BY FACILITY TYPE

PURPA PROJECTS ONLINE		
Biomass	10	29.45 MW
CoGen	1	15.90 MW
Thermal	3	15.00 MW
Hydro	64	143.70 MW
Wind	27	576.92 MW
	105	780.97 MW

PURPA PROJECTS UNDER CONTRACT NOT YET ONLINE		
Solar	15	320.00 MW
Hydro	4	10.11 MW
Wind	5	50.00 MW
	24	380.11 MW

OregonSolar PROJECTS ONLINE		
OR Solar	60	0.46 MW
	60	0.46 MW

Non PURPA PROJECTS ONLINE		
Geothermal	2	35.00 MW
Wind	1	100.65 MW
	3	135.65 MW

Totals	Projects	Capacity
	192	1,297.19 MW

**Idaho Power Company
Renewable Energy Contracts List
as of 4/17/2015**

PROJECT DETAILS

PURPA PROJECTS ONLINE

<u>Project Number</u>	<u>Facility Type</u>	<u>Project Name</u>	<u>State</u>	<u>County</u>	<u>ProjectSize (MW)</u>
31616150	Biomass	B6 Anaerobic Digester	ID	Gooding	2.28
41365515	Biomass	Bannock County Landfill	ID	Bannock County	3.20
31615100	Biomass	Bettencourt Dry Creek BioFactory, LLC	ID	Twin Falls	2.25
31616100	Biomass	Big Sky West Dairy Digester (DF-AP #1, LLC)	ID	Gooding	1.50
31616115	Biomass	Double A Digester Project	ID	Lincoln	4.50
21865113	Biomass	Fighting Creek Landfill Gas to Energy Station	ID	Kootenai	3.06
21615100	Biomass	Hidden Hollow Landfill Gas	ID	Ada	3.20
41455091	Biomass	Pocatello Waste	ID	Bannock	0.46
31616110	Biomass	Rock Creek Dairy	ID	Twin Falls	4.00
11766002	Biomass	Tamarack Cspg	ID	Adams	5.00
Total Biomass Projects: 10					29.45
41870295	CoGen	Simplot - Pocatello	ID	Power	15.90
Total CoGen Projects: 1					15.90
31765150	Thermal	Magic Valley	ID	Minidoka	10.00
21662100	Thermal	Tasco - Nampa	ID	Canyon	2.00
31616082	Thermal	Tasco - Twin Falls	ID	Twin Falls	3.00
Total Thermal Projects: 3					15.00
21615205	Hydro	Arena Drop	ID	Canyon	0.45
21615078	Hydro	Barber Dam	ID	Ada	3.70
31214058	Hydro	Birch Creek	ID	Gooding	0.05
31415065	Hydro	Black Canyon #3	ID	Gooding	0.14
31615140	Hydro	Blind Canyon	ID	Gooding	1.63
31416013	Hydro	Box Canyon	ID	Twin Falls	0.36
31515100	Hydro	Briggs Creek	ID	Twin Falls	0.60
31715126	Hydro	Bypass	ID	Jerome	9.96
31416020	Hydro	Canyon Springs	ID	Twin Falls	0.13
31616081	Hydro	Cedar Draw	ID	Twin Falls	1.55
31516014	Hydro	Clear Springs Trout	ID	Twin Falls	0.52
31615057	Hydro	Crystal Springs	ID	Twin Falls	2.44
31415023	Hydro	Curry Cattle Company	ID	Twin Falls	0.22

**Idaho Power Company
Renewable Energy Contracts List
as of 4/17/2015**

PURPA PROJECTS ONLINE

<u>Project Number</u>	<u>Facility Type</u>	<u>Project Name</u>	<u>State</u>	<u>County</u>	<u>ProjectSize (MW)</u>
31615106	Hydro	Dietrich Drop	ID	Jerome	4.50
44395973	Hydro	Eightmile Hydro Project	ID	Lemhi	0.36
11615077	Hydro	Elk Creek	ID	Idaho	2.00
41717137	Hydro	Falls River	ID	Fremont	9.10
21615215	Hydro	Fargo Drop Hydroelectric	ID	Canyon	1.27
31615121	Hydro	Faulkner Ranch	ID	Gooding	0.87
31415134	Hydro	Fisheries Dev.	ID	Gooding	0.26
31615098	Hydro	Geo-Bon #2	ID	Lincoln	0.93
31315093	Hydro	Hailey Cssp	ID	Blaine	0.06
31715128	Hydro	Hazelton A	ID	Jerome	8.10
31715140	Hydro	Hazelton B	ID	Jerome	7.60
11715144	Hydro	Horseshoe Bend Hydro	ID	Boise	9.50
31415094	Hydro	Jim Knight	ID	Gooding	0.34
31615031	Hydro	Kasel & Witherspoon	ID	Twin Falls	0.90
31615030	Hydro	Koyle Small Hydro	ID	Gooding	1.25
31615056	Hydro	Lateral # 10	ID	Twin Falls	2.06
31316015	Hydro	Lemoyne	ID	Gooding	0.08
31615105	Hydro	Little Wood Rvr Res	ID	Blaine	2.85
31515107	Hydro	Littlewood / Arkoosh	ID	Lincoln	0.87
31715099	Hydro	Low Line Canal	ID	Twin Falls	7.97
31615130	Hydro	Low Line Midway Hydro	ID	Twin Falls	2.50
31615125	Hydro	Lowline #2	ID	Twin Falls	2.79
31715123	Hydro	Magic Reservoir	ID	Blaine	9.07
31515009	Hydro	Malad River	ID	Gooding	0.62
31615117	Hydro	Marco Ranches	ID	Jerome	1.20
31615154	Hydro	Mile 28	ID	Jerome	1.50
12618250	Hydro	Mill Creek Hydroelectric	OR	Union	0.80
12614070	Hydro	Mitchell Butte	OR	Malheur	2.09
21615200	Hydro	Mora Drop Small Hydroelectric Facility	ID	Ada	1.85
31515004	Hydro	Mud Creek/S & S	ID	Twin Falls	0.52
31414111	Hydro	Mud Creek/White	ID	Twin Falls	0.21
12616071	Hydro	Owyhee Dam Cssp	OR	Malheur	5.00

**Idaho Power Company
Renewable Energy Contracts List
as of 4/17/2015**

PURPA PROJECTS ONLINE

<u>Project Number</u>	<u>Facility Type</u>	<u>Project Name</u>	<u>State</u>	<u>County</u>	<u>ProjectSize (MW)</u>
31615067	Hydro	Pigeon Cove	ID	Twin Falls	1.89
31415164	Hydro	Pristine Springs #1 2005	ID	Jerome	0.13
31415165	Hydro	Pristine Springs #3 2005	ID	Jerome	0.20
21415119	Hydro	Reynolds Irrigation	ID	Canyon	0.26
31615003	Hydro	Rock Creek #1	ID	Twin Falls	2.05
31615104	Hydro	Rock Creek #2	ID	Twin Falls	1.90
31515103	Hydro	Sagebrush	ID	Lincoln	0.43
31617100	Hydro	Sahko Hydro	ID	Twin Falls	0.50
41515122	Hydro	Schaffner	ID	Lemhi	0.53
11415009	Hydro	Shingle Creek	ID	Adams	0.22
31615158	Hydro	Shoshone #2	ID	Lincoln	0.58
31416001	Hydro	Shoshone Csp	ID	Lincoln	0.37
31315021	Hydro	Snake River Pottery	ID	Gooding	0.07
31414075	Hydro	Snedigar	ID	Twin Falls	0.54
41717139	Hydro	Tiber Dam	MT	Liberty County	7.50
31415027	Hydro	Trout-Co	ID	Gooding	0.24
12616072	Hydro	Tunnel #1	OR	Malheur	7.00
31315029	Hydro	White Water Ranch	ID	Gooding	0.16
31715141	Hydro	Wilson Lake Hydro	ID	Jerome	8.40
Total Hydro Projects: 64					143.70
21615101	Wind	Bennett Creek Wind Farm	ID	Elmore	21.00
31765170	Wind	Burley Butte Wind Park	ID	Cassia	21.30
31315050	Wind	Camp Reed Wind Park	ID	Elmore	22.50
31318100	Wind	Cassia Wind Farm LLC	ID	Twin Falls	10.50
21615115	Wind	Cold Springs Windfarm	ID	Elmore	23.00
21615120	Wind	Desert Meadow Windfarm	ID	Elmore	23.00
31315035	Wind	Fossil Gulch Wind	ID	Twin Falls	10.50
31765160	Wind	Golden Valley Wind Park	ID	Cassia	12.00
21615125	Wind	Hammett Hill Windfarm	ID	Elmore	23.00
31315130	Wind	High Mesa Wind Project	ID	Twin Falls/Elmore	40.00
41718140	Wind	Horseshoe Bend Wind	MT	Cascade	9.00
21615105	Wind	Hot Springs Wind Farm	ID	Elmore	21.00

**Idaho Power Company
Renewable Energy Contracts List
as of 4/17/2015**

PURPA PROJECTS ONLINE

<u>Project Number</u>	<u>Facility Type</u>	<u>Project Name</u>	<u>State</u>	<u>County</u>	<u>ProjectSize (MW)</u>
12618200	Wind	Lime Wind Energy	OR	Baker	3.00
21615130	Wind	Mainline Windfarm	ID	Elmore	23.00
31720190	Wind	Milner Dam Wind	ID	Cassia	19.92
31315075	Wind	Oregon Trail Wind Park	ID	Twin Falls	13.50
31315060	Wind	Payne's Ferry Wind Park	ID	Twin Falls	21.00
31315045	Wind	Pilgrim Stage Station Wind Park	ID	Twin Falls	10.50
41455300	Wind	Rockland Wind Farm	ID	Power	80.00
21615135	Wind	Ryegrass Windfarm	ID	Elmore	23.00
31618100	Wind	Salmon Falls Wind	ID	Twin Falls	22.00
21615110	Wind	Sawtooth Wind Project	ID	Elmore	22.00
31315055	Wind	Thousand Springs Wind Park	ID	Twin Falls	12.00
31315065	Wind	Tuana Gulch Wind Park	ID	Twin Falls	10.50
31315150	Wind	Tuana Springs Expansion	ID	Twin Falls	35.70
21615140	Wind	Two Ponds Windfarm	ID	Elmore	23.00
31315070	Wind	Yahoo Creek Wind Park	ID	Twin Falls	21.00
Total Wind Projects: 27					576.92

**Idaho Power Company
Renewable Energy Contracts List
as of 4/17/2015**

PURPA PROJECTS UNDER CONTRACT NOT YET ONLINE

<u>Project Number</u>	<u>Facility Type</u>	<u>Project Name</u>	<u>State</u>	<u>County</u>	<u>ProjectSize (MW)</u>
25586937	Solar	American Falls Solar II, LLC	ID	Power	20.00
25591644	Solar	American Falls Solar, LLC	ID	Power	20.00
25088520	Solar	Boise City Solar, LLC	ID	Ada	40.00
12616100	Solar	Grand View PV Solar Two	ID	Elmore	80.00
12727358	Solar	Grove Solar Center, LLC	OR	Malheur	10.00
12739324	Solar	Hylne Solar Center, LLC	OR	Malheur	10.00
25031625	Solar	Mountain Home Solar, LLC	ID	Elmore	20.00
25524198	Solar	Murphy Flat Power, LLC	ID	Owhyee	20.00
12705219	Solar	Open Range Solar Center, LLC	OR	Malheur	10.00
25573998	Solar	Orchard Ranch Solar, LLC	ID	Ada	20.00
25075329	Solar	Pocatello Solar 1, LLC	ID	Power	20.00
12741175	Solar	Railroad Solar Center, LLC	OR	Malheur	10.00
25580735	Solar	Simco Solar, LLC	ID	Elmore	20.00
12745920	Solar	Thunderegg Solar Center, LLC	OR	Malheur	10.00
12719362	Solar	Vale Air Solar Center, LLC	OR	Malheur	10.00
Total Solar Projects: 15					320.00

20140708	Hydro	Black Canyon Bliss Hydro	ID	Gooding	0.03
20140601	Hydro	Clark Canyon Hydroelectric	MT	Beaverhead	7.55
20140328	Hydro	Head of U Canal Project	ID	Jerome	1.28
31515110	Hydro	Little Wood River Ranch II	ID	Shoshone	1.25
Total Hydro Projects: 4					10.11

12618240	Wind	Benson Creek Windfarm	OR	Baker	10.00
12618230	Wind	Durbin Creek Windfarm	OR	Baker	10.00
12618220	Wind	Jett Creek Windfarm	OR	Baker	10.00
12618210	Wind	Prospector Windfarm	OR	Baker	10.00
12618245	Wind	Willow Spring Windfarm	OR	Baker	10.00
Total Wind Projects: 5					50.00

OregonSolar PROJECTS ONLINE

<u>Project Number</u>	<u>Facility Type</u>	<u>Project Name</u>	<u>State</u>	<u>County</u>	<u>ProjectSize (MW)</u>
90001311	OR Solar	7 kW Shaffer Solar	OR	Malheur	0.01
90001416	OR Solar	Chamberlain Dairy	OR	Malheur	0.01

**Idaho Power Company
Renewable Energy Contracts List
as of 4/17/2015**

OregonSolar PROJECTS ONLINE

<u>Project Number</u>	<u>Facility Type</u>	<u>Project Name</u>	<u>State</u>	<u>County</u>	<u>ProjectSize (MW)</u>
90001413	OR Solar	Chamberlain House	OR	Malheur	0.01
90001412	OR Solar	Clark - 5th Ave Pivot	OR	Malheur	0.00
90001411	OR Solar	Clark - 6th Ave Rental	OR	Malheur	0.01
90001415	OR Solar	Clark - Jake's House	OR	Malheur	0.01
90001410	OR Solar	Clark - New House	OR	Malheur	0.01
90000028	OR Solar	Cliff and Pat Looney	OR	Malheur	0.01
90000005	OR Solar	Clinton Kennington	OR	Malheur	0.01
90000079	OR Solar	Dean Mackey_79	OR	Malheur	0.01
90000025	OR Solar	Findley Family Trust - Findley Land and Livestock	OR	Malheur	0.01
90000075	OR Solar	Findley Land and Livestock_75	OR	Malheur	0.00
90000081	OR Solar	Findley Land and Livestock_81	OR	Malheur	0.00
90000006	OR Solar	Gary Taylor_06	OR	Malheur	0.01
90000003	OR Solar	Gordon D. Luther_03	OR	Malheur	0.01
90000007	OR Solar	Gordon Dale Luther_07	OR	Malheur	0.01
90001417	OR Solar	Jackie Hansen	OR	Malheur	0.01
90000077	OR Solar	Jason Peters_77	OR	Malheur	0.01
90001301	OR Solar	Jensen Farms LLC_1301	OR	Malheur	0.00
90001302	OR Solar	Jensen Farms LLC_1302	OR	Malheur	0.01
90001303	OR Solar	Jensen Farms LLC_1303	OR	Malheur	0.01
90001307	OR Solar	Jensen Farms LLC_1307	OR	Malheur	0.00
90001310	OR Solar	Jensen Farms LLC_1310	OR	Malheur	0.01
90000043	OR Solar	Jensen Farms LLC_43	OR	Malheur	0.01
90000045	OR Solar	Jensen Farms LLC_45	OR	Malheur	0.01
90000046	OR Solar	Jensen Farms LLC_46	OR	Malheur	0.01
90000047	OR Solar	Jensen Farms LLC_47	OR	Malheur	0.01
90000048	OR Solar	Jensen Farms LLC_48	OR	Malheur	0.01
90000050	OR Solar	Jensen Farms LLC_50	OR	Malheur	0.01
90000052	OR Solar	Jensen Farms LLC_52	OR	Malheur	0.01
90000054	OR Solar	Jensen Farms LLC_54	OR	Malheur	0.01
90000056	OR Solar	Jensen Farms LLC_56	OR	Malheur	0.01
90000057	OR Solar	Jensen Farms LLC_57	OR	Malheur	0.01
90000060	OR Solar	Jensen Farms LLC_60	OR	Malheur	0.01

**Idaho Power Company
Renewable Energy Contracts List
as of 4/17/2015**

OregonSolar PROJECTS ONLINE

<u>Project Number</u>	<u>Facility Type</u>	<u>Project Name</u>	<u>State</u>	<u>County</u>	<u>ProjectSize (MW)</u>
90000076	OR Solar	Jensen Farms LLC_76	OR	Malheur	0.01
90000044	OR Solar	Kenneth Jensen_44	OR	Malheur	0.01
90001306	OR Solar	Malheur County Fairgrounds #1	OR	Malheur	0.01
90001313	OR Solar	Malheur County Fairgrounds #2	OR	Malheur	0.01
90001315	OR Solar	Malheur County Fairgrounds #3	OR	Malheur	0.01
90000073	OR Solar	Mark Wettstein_73	OR	Malheur	0.01
90000088	OR Solar	Mark Wettstein_88	OR	Malheur	0.01
90001414	OR Solar	Michael McGourty	OR	Malheur	0.01
90001312	OR Solar	Onion Storage_1312	OR	Malheur	0.01
90000063	OR Solar	Ontario City Hall_63	OR	Malheur	0.01
90000072	OR Solar	Ontario Golf Clubhouse_72	OR	Malheur	0.01
90000062	OR Solar	Ontario Public Works Shop_62	OR	Malheur	0.01
90000059	OR Solar	Ontario WTP East Bldg_59	OR	Malheur	0.01
90000055	OR Solar	Ontario WTP West Ponds_55	OR	Malheur	0.01
90000080	OR Solar	Ontario WWTP Aerators_80	OR	Malheur	0.01
90000084	OR Solar	Ontario WWTP Building_84	OR	Malheur	0.01
90000086	OR Solar	Ontario WWTP Lift Station_86	OR	Malheur	0.01
90000051	OR Solar	Pine Eagle High School	OR	Baker	0.01
90000064	OR Solar	Pine Eagle Middle School	OR	Baker	0.01
90000078	OR Solar	Pine Eagle Pump Station	OR	Baker	0.01
90000001	OR Solar	Randy Bauer	OR	Malheur	0.01
90000067	OR Solar	Robert Mairs_67	OR	Malheur	0.01
90000002	OR Solar	Roger Findley	OR	Malheur	0.01
90000061	OR Solar	Roger Findley_61	OR	Malheur	0.01
90001309	OR Solar	Schuster	OR	Malheur	0.01
90000004	OR Solar	Treasure Valley Community College	OR	Malheur	0.01
Total OR Solar Projects: 60					0.46

Non PURPA PROJECTS ONLINE

<u>Project Number</u>	<u>Facility Type</u>	<u>Project Name</u>	<u>State</u>	<u>County</u>	<u>ProjectSize (MW)</u>
10000003	Geotherma	Neal Hot Springs Unit #1	OR	Malheur	22.00
10000002	Geotherma	Raft River Unit #1	ID	Cassia	13.00

**Idaho Power Company
Renewable Energy Contracts List
as of 4/17/2015**

Total Geothermal Projects: 2				35.00	
10000001	Wind	Elkhorn Wind Project	OR	Union	100.65
Total Wind Projects: 1				100.65	

BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON

IDAHO POWER COMPANY

Exhibit Accompanying Direct Testimony of Randy Allphin

April 24, 2015

Idaho Power Company Proposed PURPA Solar - As of April 22, 2015 Idaho								
	Project Name	Project Developer	MWac	Term (Years)	State	Estimated Operation Date	Estimated Obligation (includes integration)	Estimated 2 Year Obligation (includes integration)
1	Project A1	Developer A	80	20	Idaho	12/01/16	\$213,159,625	\$9,052,344
2	Project A2	Developer A	28	20	Idaho	12/01/16	\$62,482,130	\$2,843,077
3	Project A3	Developer A	30	20	Idaho	12/31/16	\$40,316,768	\$2,110,838
4	Project A4	Developer A	30	20	Idaho	12/31/16	\$40,316,768	\$2,110,838
5	Project B1	Developer B	20	20	Idaho	10/30/16	\$48,378,647	\$2,408,124
6	Project B2	Developer B	20	20	Idaho	10/30/16	\$45,549,075	\$2,277,533
7	Project C1	Developer C	20	20	Idaho	12/31/16	\$53,382,246	\$2,318,923
8	Project C2	Developer C	20	20	Idaho	12/31/16	\$53,283,030	\$2,337,229
9	Project C3	Developer C	20	20	Idaho	12/31/16	\$49,203,964	\$2,150,196
10	Project C4	Developer C	20	20	Idaho	12/31/16	\$49,360,962	\$2,148,558
11	Project C5	Developer C	20	20	Idaho	12/31/16	\$48,760,343	\$2,084,643
12	Project C6	Developer C	20	20	Idaho	12/31/16	\$51,486,567	\$2,208,705
13	Project C7	Developer C	20	20	Idaho	12/31/16	\$51,493,788	\$2,178,763
14	Project C8	Developer C	20	20	Idaho	12/31/16	\$51,355,246	\$2,169,541
15	Project C9	Developer C	20	20	Idaho	12/31/16	\$51,797,625	\$2,148,386
16	Project C10	Developer C	20	20	Idaho	12/31/16	\$48,438,230	\$2,048,049
17	Project D1	Developer D	6	20	Idaho	12/31/16	\$8,063,354	\$422,168
18	Project D2	Developer D	7.5	20	Idaho	12/31/16	\$10,079,192	\$527,709
19	Project D3	Developer D	10	20	Idaho	12/31/16	\$14,413,193	\$810,279
20	Project D4	Developer D	10	20	Idaho	12/31/16	\$14,412,285	\$806,685
21	Project E1	Developer E	13	20	Idaho	12/31/16	\$17,470,600	\$914,696
22	Project E2	Developer E	20	20	Idaho	12/31/16	\$26,877,846	\$1,407,225
23	Project E3	Developer E	13	20	Idaho	12/31/16	\$17,470,600	\$914,696
24	Project E4	Developer E	20	20	Idaho	12/31/16	\$26,877,846	\$1,407,225
25	Project E5	Developer E	20	20	Idaho	12/31/16	\$26,877,846	\$1,407,225
26	Project E6	Developer E	20	20	Idaho	12/31/16	\$26,877,846	\$1,407,225
27	Project E7	Developer E	20	20	Idaho	12/31/16	\$26,877,846	\$1,407,225
28	Project E8	Developer E	20	20	Idaho	12/31/16	\$26,877,846	\$1,407,225
29	Project E9	Developer E	20	20	Idaho	12/31/16	\$26,877,846	\$1,407,225
30	Project E10	Developer E	20	20	Idaho	12/31/16	\$26,877,846	\$1,407,225
31	Project E11	Developer E	20	20	Idaho	12/31/16	\$26,877,846	\$1,407,225
32	Project E12	Developer E	13	20	Idaho	12/31/16	\$17,470,600	\$914,696
33	Project F1	Developer F	70	20	Idaho	12/31/16	\$94,072,460	\$4,925,289
34	Project G1	Developer G	3	20	Idaho	12/31/16	\$4,031,677	\$211,084
35	Project H1	Developer H	1	20	Idaho	12/31/16	\$1,343,892	\$70,361
36	Project I1	Developer I	20	20	Idaho	12/31/16	\$26,877,846	\$1,407,225
37	Project B3	Developer B	20	5	Idaho	12/31/16	\$42,588,215	\$2,059,783
38	Project B4	Developer B	20	5	Idaho	12/31/16	\$42,415,239	\$2,053,467
39	Project B5	Developer B	50	5	Idaho	12/31/16	\$103,750,045	\$4,820,801
40	Project B6	Developer B	40	5	Idaho	12/31/16	\$80,232,480	\$3,666,449
41	Project D5	Developer D	10	20	Idaho	12/31/16	\$19,377,901	\$1,001,813
42	Project D6	Developer D	10	20	Idaho	12/31/16	\$18,700,526	\$968,550
43	Project L1	Developer L	28	20	Idaho	12/31/16	\$37,628,984	\$1,970,115
44	Project L2	Developer L	28	20	Idaho	12/31/16	\$37,628,984	\$1,970,115
45	Project L3	Developer L	80	20	Idaho	12/31/16	\$107,511,382	\$5,628,901
46	Project O1	Developer O	20	20	Idaho	12/31/16	\$26,877,846	\$1,407,225
47	Project O2	Developer O	20	20	Idaho	12/31/16	\$26,877,846	\$1,407,225
Subtotal			1081				\$1,969,960,769	\$94,140,109

Idaho Power Company Proposed PURPA Solar - As of April 22, 2015 <u>Oregon</u>								
	Project Name	Project Developer	MWac	Term (Years)	State	Scheduled Operation Date	Estimated Obligation (Includes integration)	Estimated 2 Year Obligation (includes integration)
48	Project J1	Developer J	10	20	Oregon	06/15/16	\$30,325,795	\$2,008,461
49	Project E13	Developer E	20	20	Oregon	12/31/16	\$26,877,846	\$1,407,225
50	Project K1	Developer K	10	20	Oregon	12/31/16	\$31,934,668	\$2,186,583
51	Project K2	Developer K	10	20	Oregon	12/31/16	\$31,934,668	\$2,186,583
52	Project K3	Developer K	10	20	Oregon	12/31/16	\$31,934,668	\$2,186,583
53	Project K4	Developer K	10	20	Oregon	12/31/16	\$31,934,668	\$2,186,583
54	Project K5	Developer K	10	20	Oregon	12/31/16	\$31,934,668	\$2,186,583
55	Project K6	Developer K	10	20	Oregon	12/31/16	\$31,934,668	\$2,186,583
56	Project K7	Developer K	10	20	Oregon	12/31/16	\$31,934,668	\$2,186,583
57	Project K8	Developer K	10	20	Oregon	12/31/16	\$31,934,668	\$2,186,583
58	Project K9	Developer K	10	20	Oregon	12/31/16	\$31,934,668	\$2,186,583
59	Project K10	Developer K	10	20	Oregon	12/31/16	\$31,934,668	\$2,186,583
60	Project M1	Developer M	5	20	Oregon	12/31/16	\$15,967,334	\$1,093,292
61	Project M2	Developer M	10	20	Oregon	12/31/16	\$31,934,668	\$2,186,583
62	Project M3	Developer M	10	20	Oregon	12/31/16	\$31,934,668	\$2,186,583
63	Project M4	Developer M	5	20	Oregon	12/31/16	\$15,967,334	\$1,093,292
64	Project M5	Developer M	10	20	Oregon	12/31/16	\$31,934,668	\$2,186,583
65	Project N1	Developer N	5	20	Oregon	12/31/16	\$15,967,334	\$1,093,292
66	Project N2	Developer N	10	20	Oregon	12/31/16	\$31,934,668	\$2,186,583
67	Project N3	Developer N	10	20	Oregon	12/31/16	\$31,934,668	\$2,186,583
68	Project N4	Developer N	10	20	Oregon	12/31/16	\$31,934,668	\$2,186,583
69	Project N5	Developer N	10	20	Oregon	12/31/16	\$31,934,668	\$2,186,583
70	Project N6	Developer N	10	20	Oregon	12/31/16	\$31,934,668	\$2,186,583
71	Project P1	Developer P	10	20	Oregon	12/31/16	\$31,934,668	\$2,186,583
72	Project Q1	Developer Q	5	20	Oregon	12/31/16	\$15,967,334	\$1,093,292
73	Project Q2	Developer Q	5	20	Oregon	12/31/16	\$15,967,334	\$1,093,292
Subtotal			245				\$743,799,003	\$50,427,223
Total			1,326				\$2,713,759,772	\$144,567,332

BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON

IDAHO POWER COMPANY

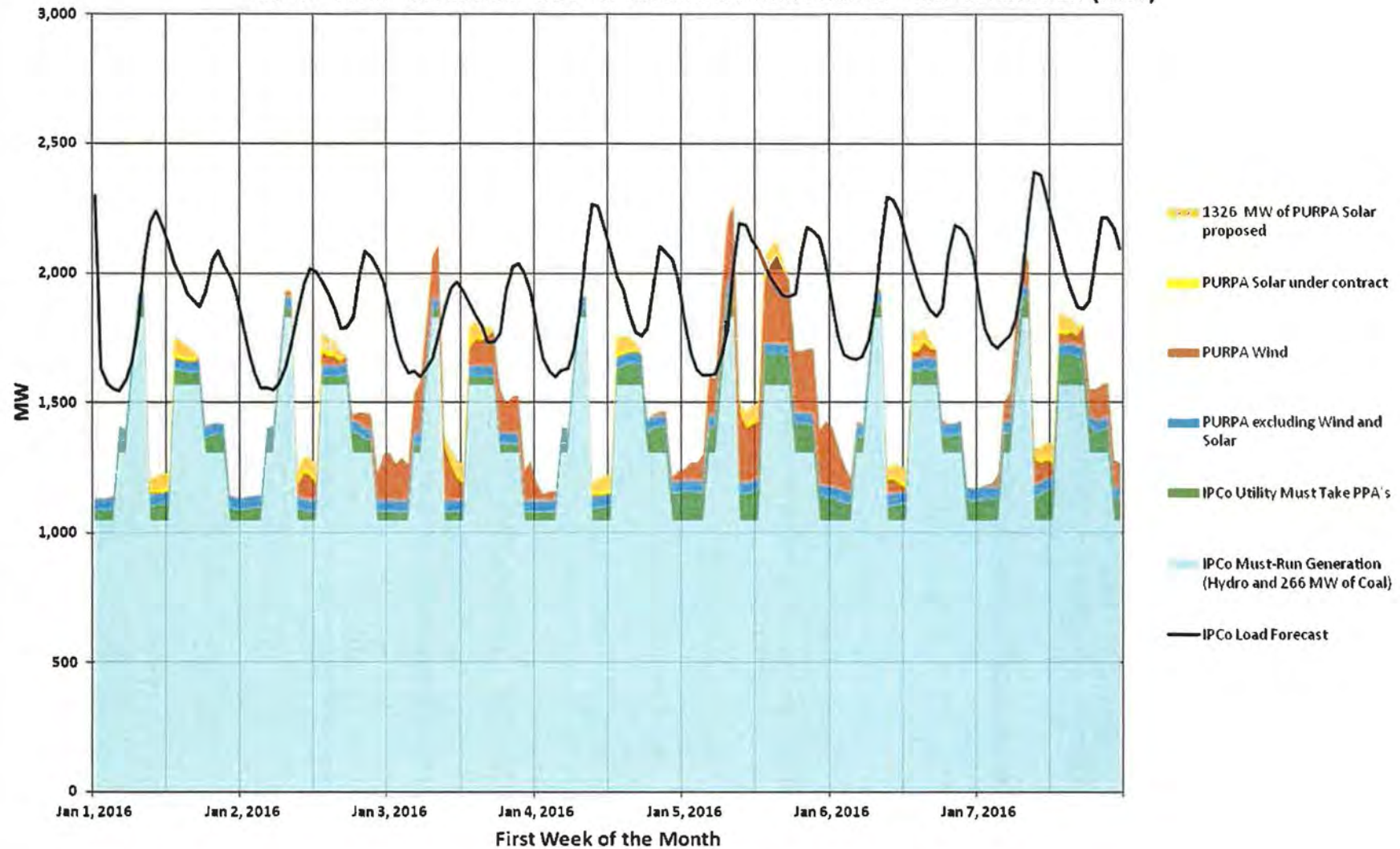
Exhibit Accompanying Direct Testimony of Randy Allphin

April 24, 2015

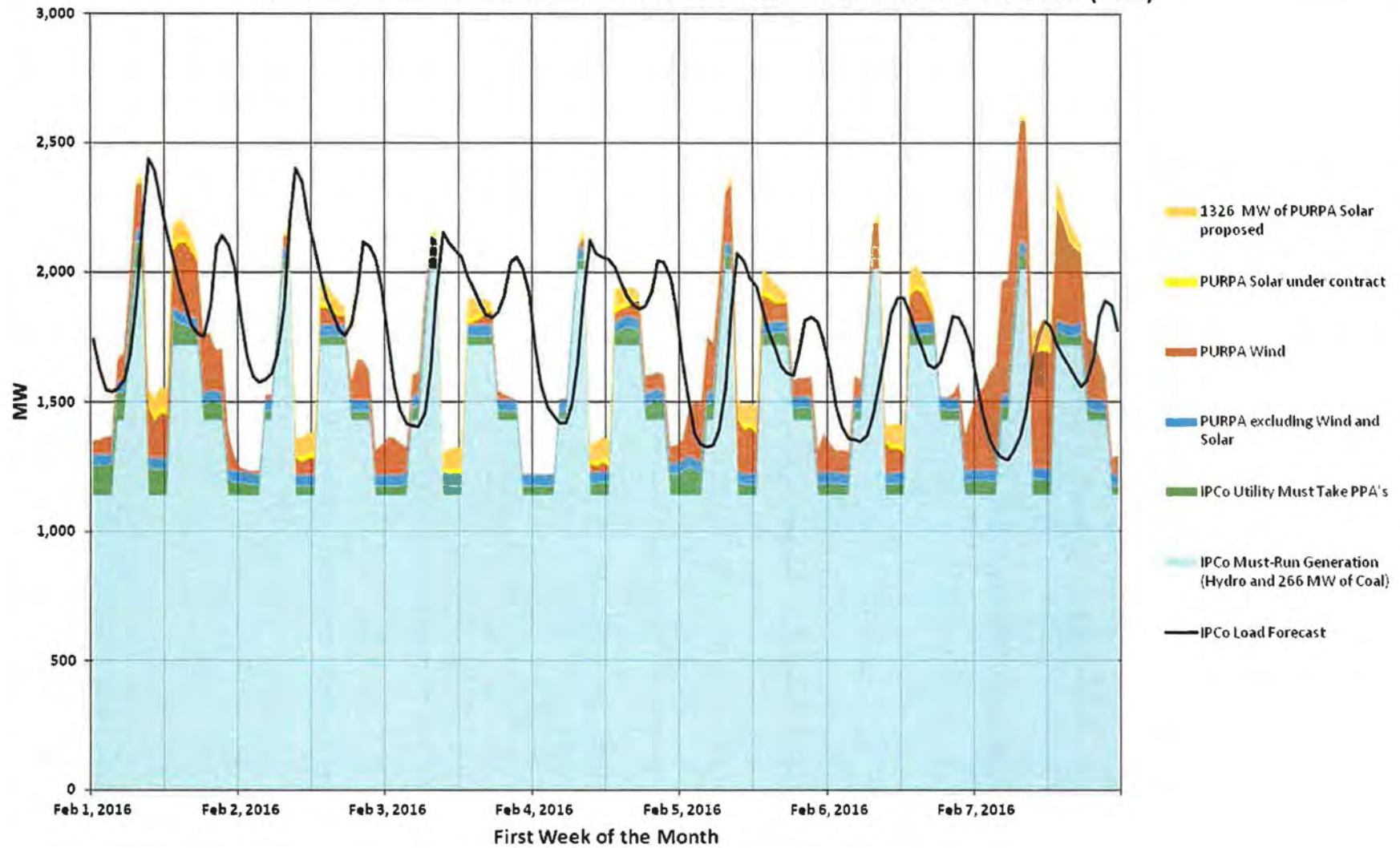
Idaho Power Company
Estimated Load, Must run Resources, Utility PPAs and PURPA
Calendar Years of 2016 and 2017

17,544 Hours	14% 2,481 Hours	29% 5,128 Hours	31% 5,503 Hours	42% 7,432 Hours
Total hours in 2016 and 2017	IPCO Only - Must run and take from Utility PPAs	IPCO Must run, must take from PPAs, plus PURPA excluding solar	IPCO Must Run, must take from Utility PPAs, plus all PURPA under contract (including solar)	IPCO Must Run, must take from Utility PPAs, all PURPA under contract (including solar), plus 885 MW of Proposed Solar

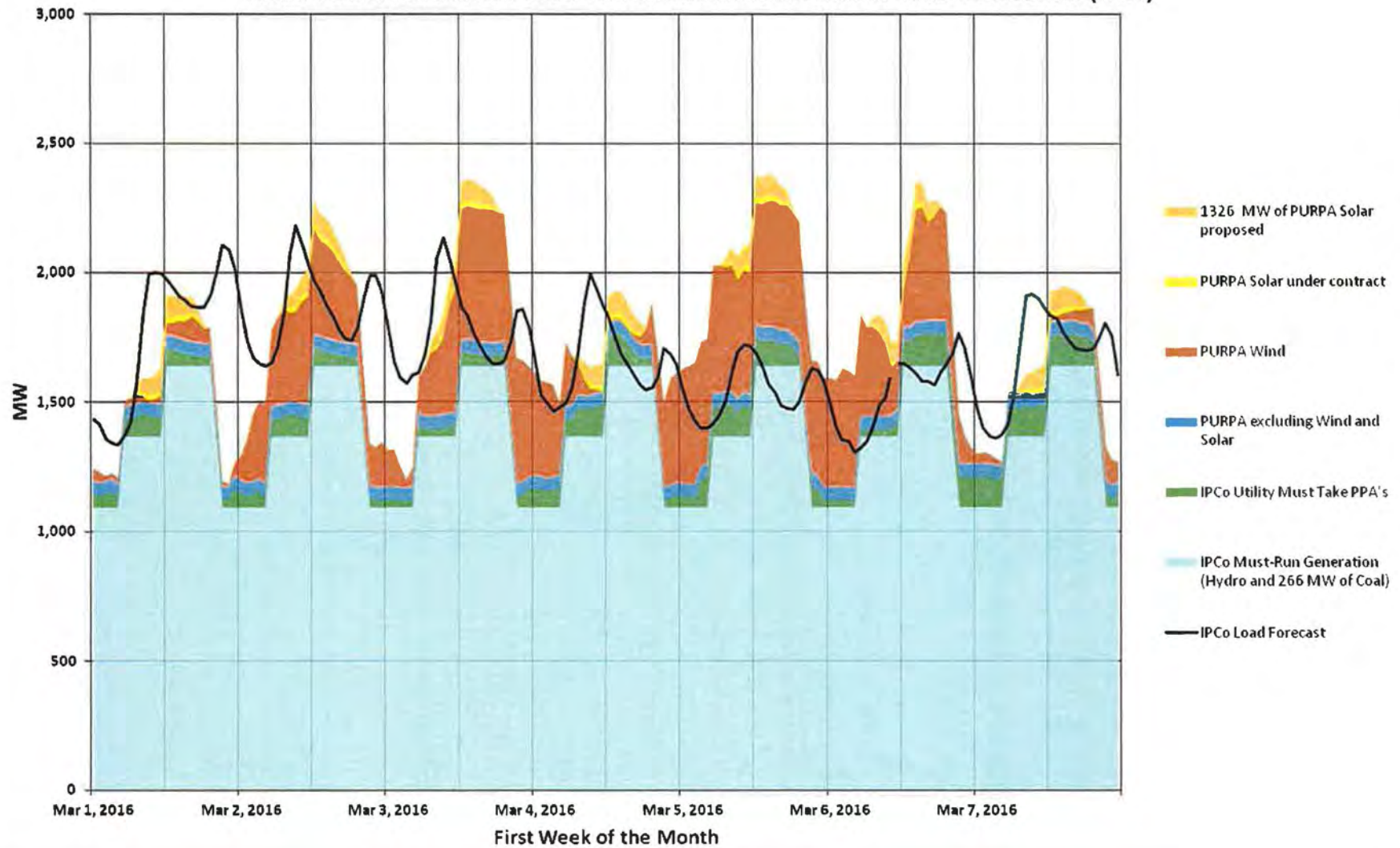
Idaho Power Forecasted Load vs. Forecasted Must Run or Take Generation (MW)



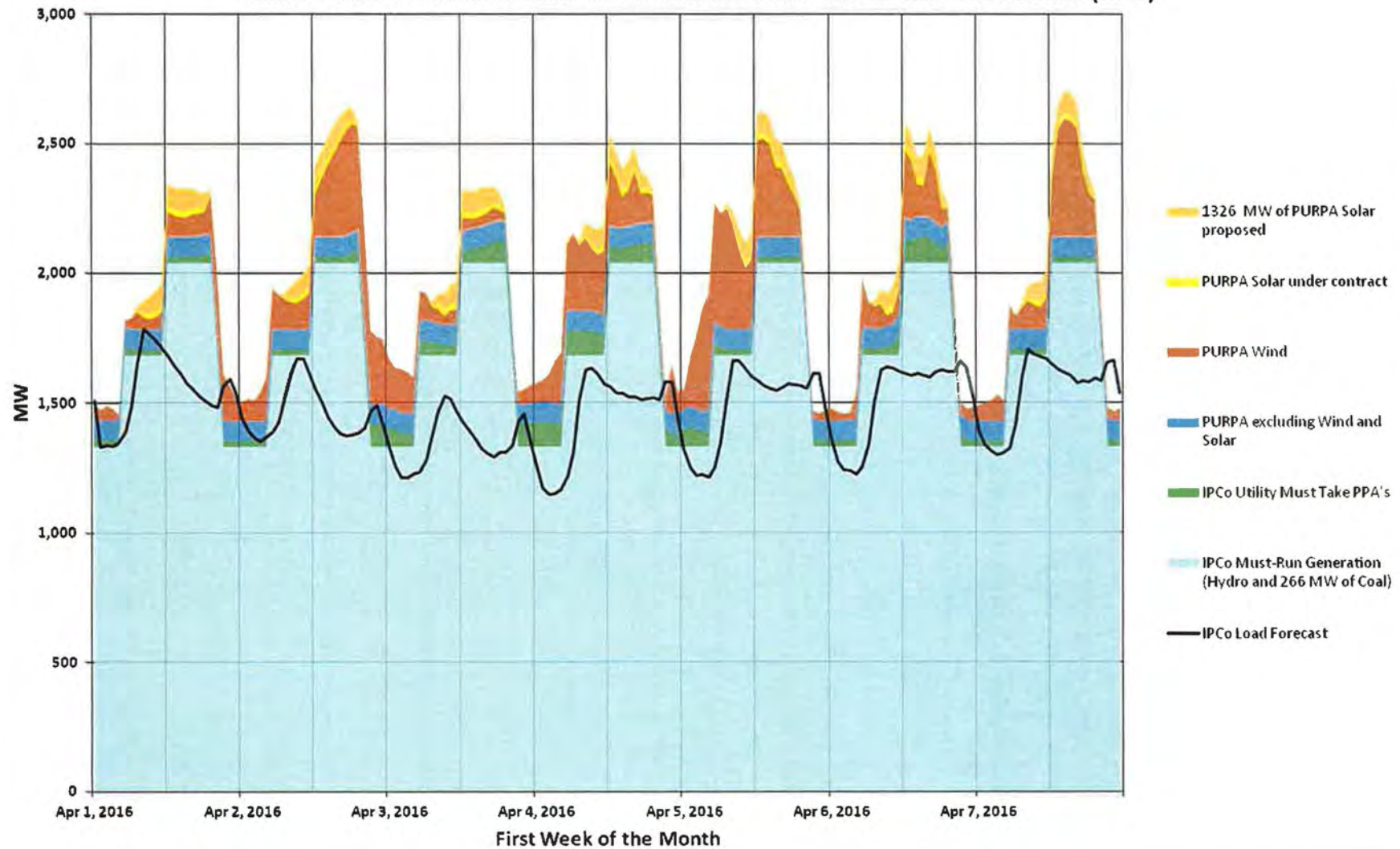
Idaho Power Forecasted Load vs. Forecasted Must Run or Take Generation (MW)



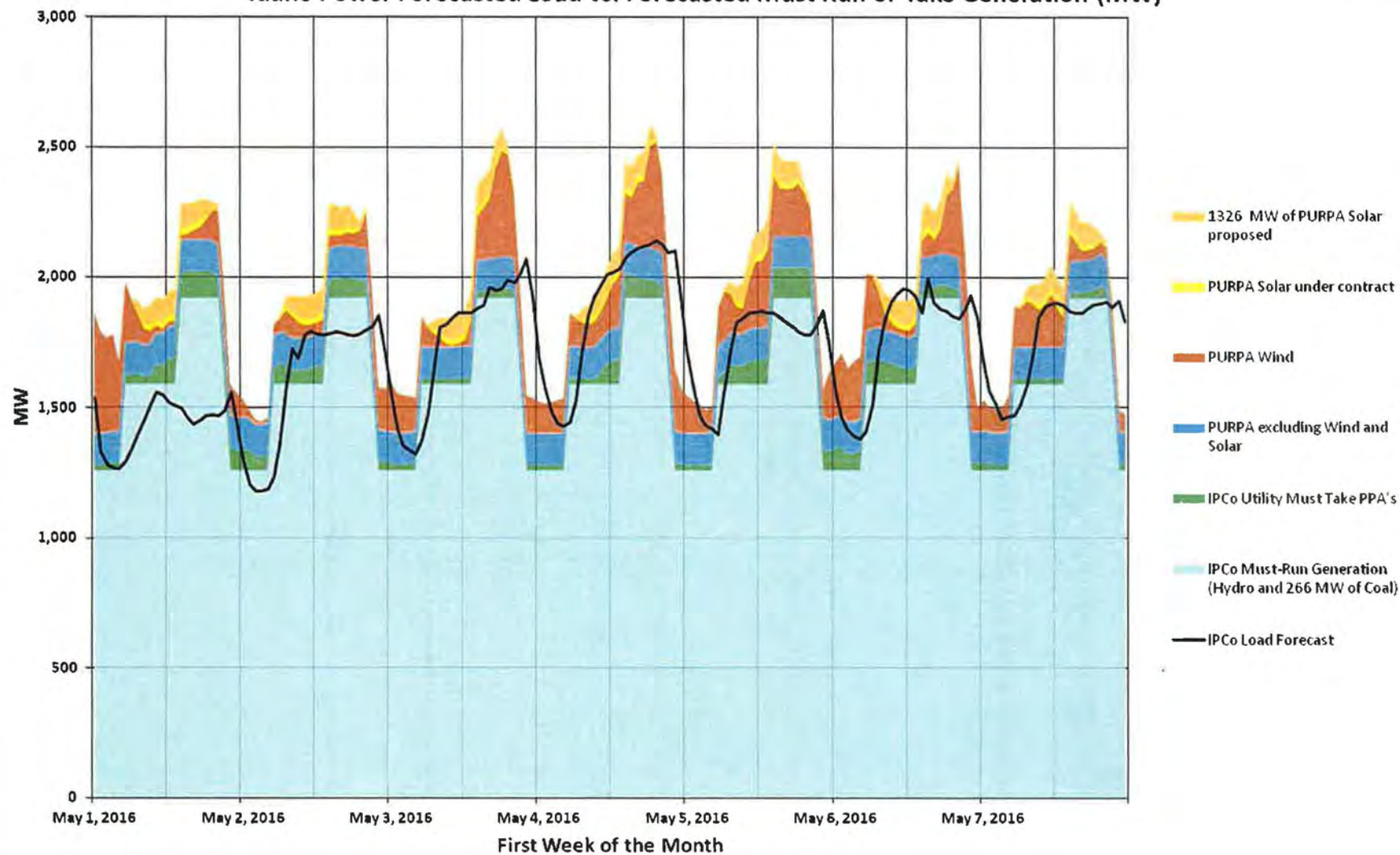
Idaho Power Forecasted Load vs. Forecasted Must Run or Take Generation (MW)



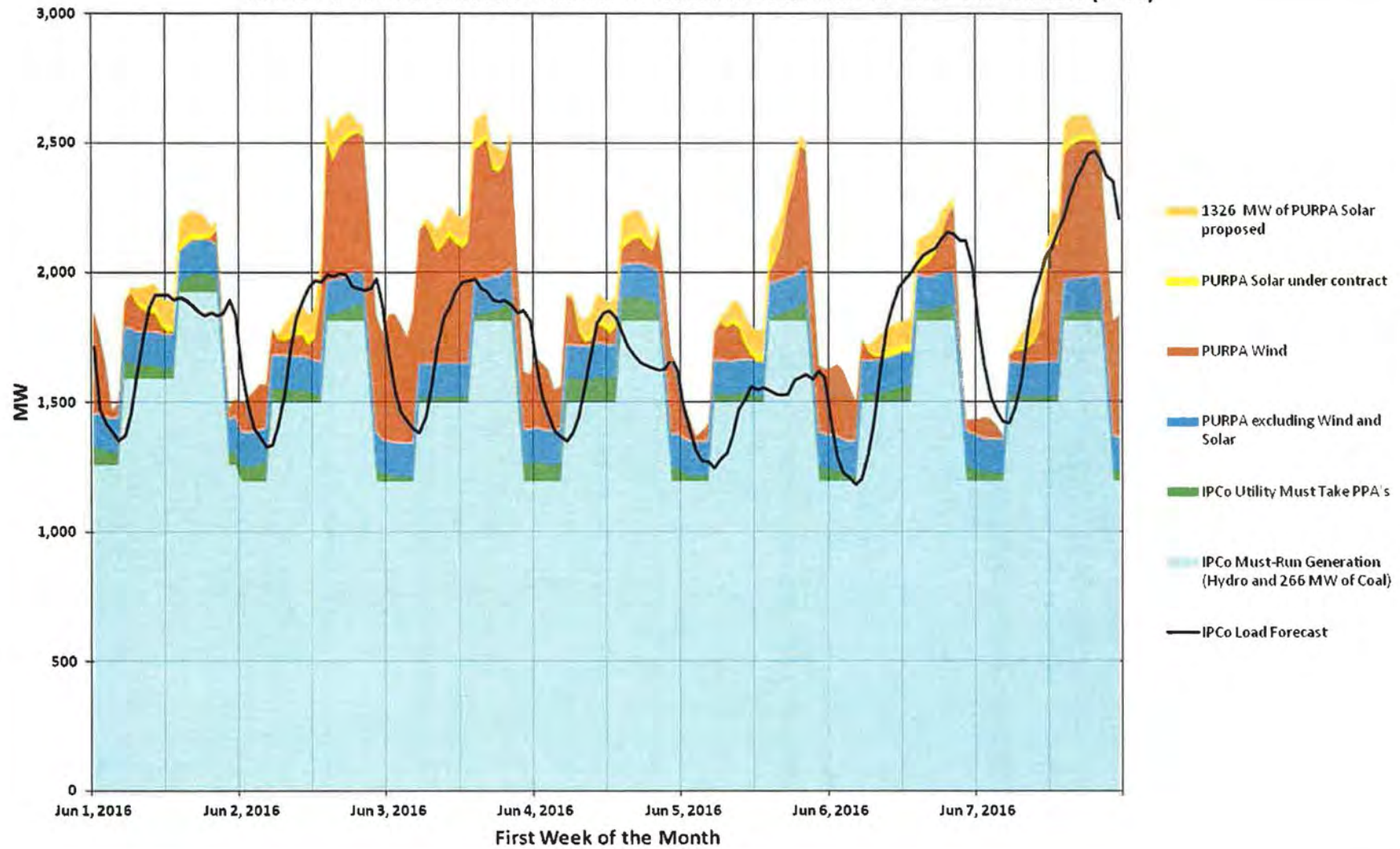
Idaho Power Forecasted Load vs. Forecasted Must Run or Take Generation (MW)

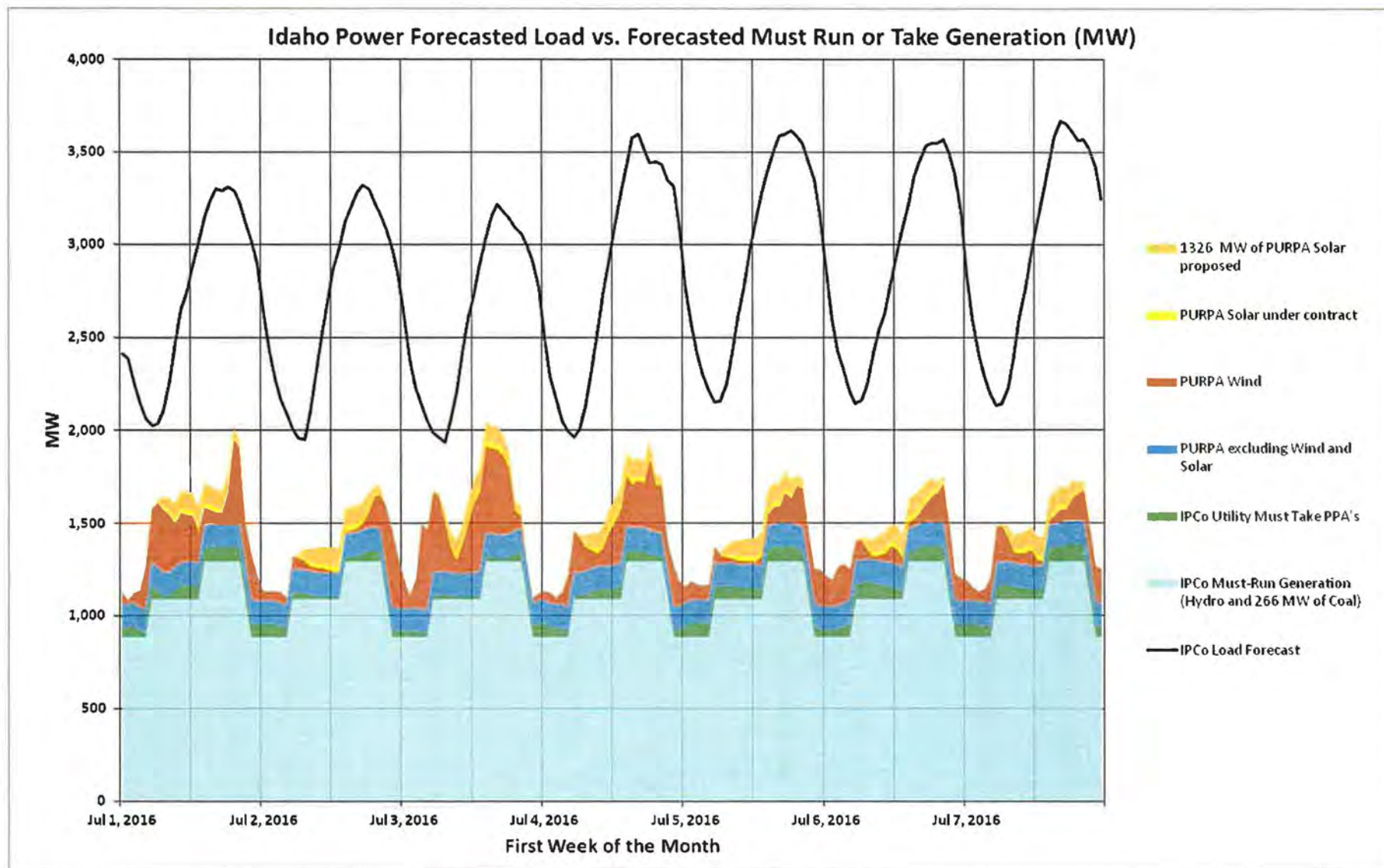


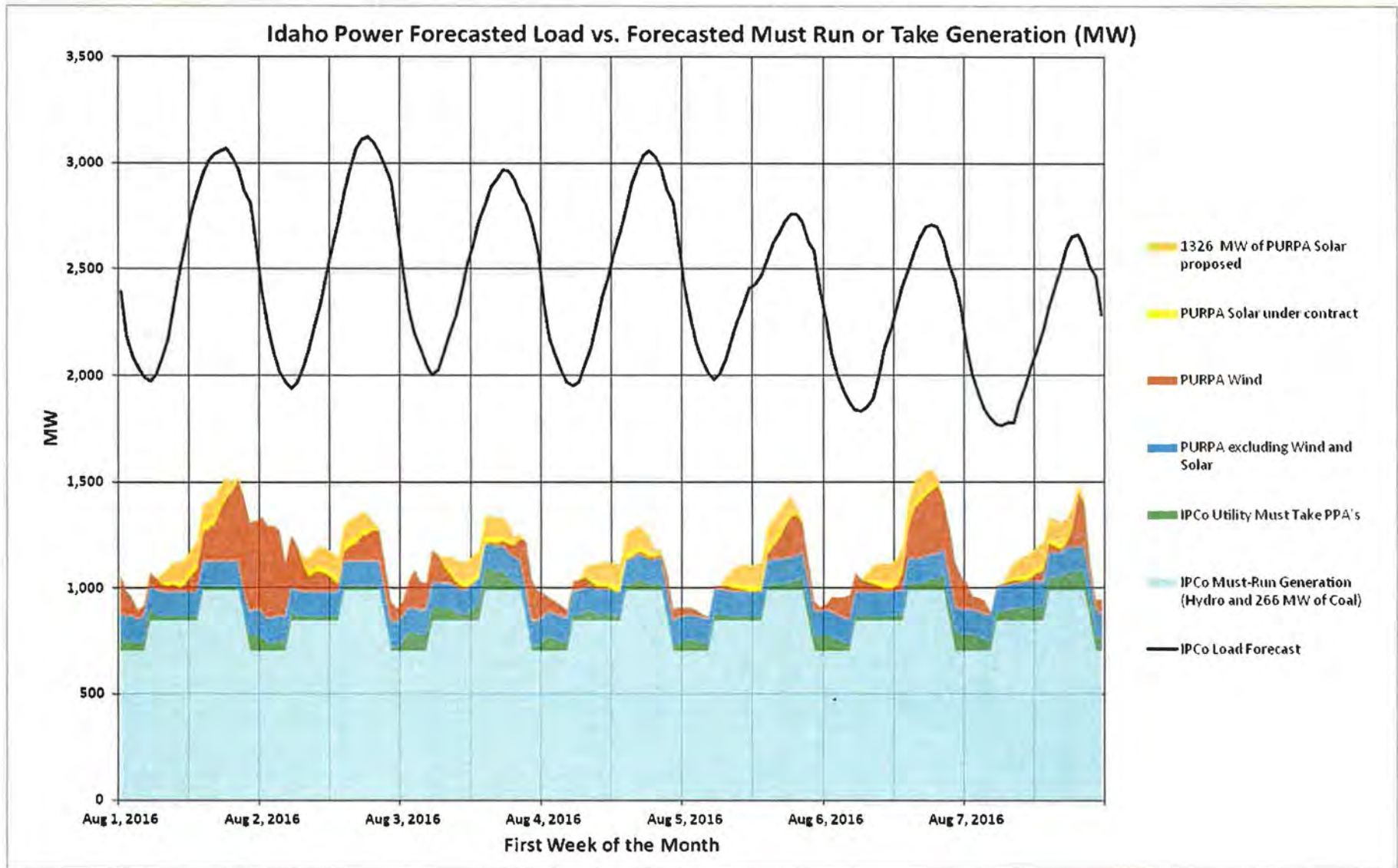
Idaho Power Forecasted Load vs. Forecasted Must Run or Take Generation (MW)



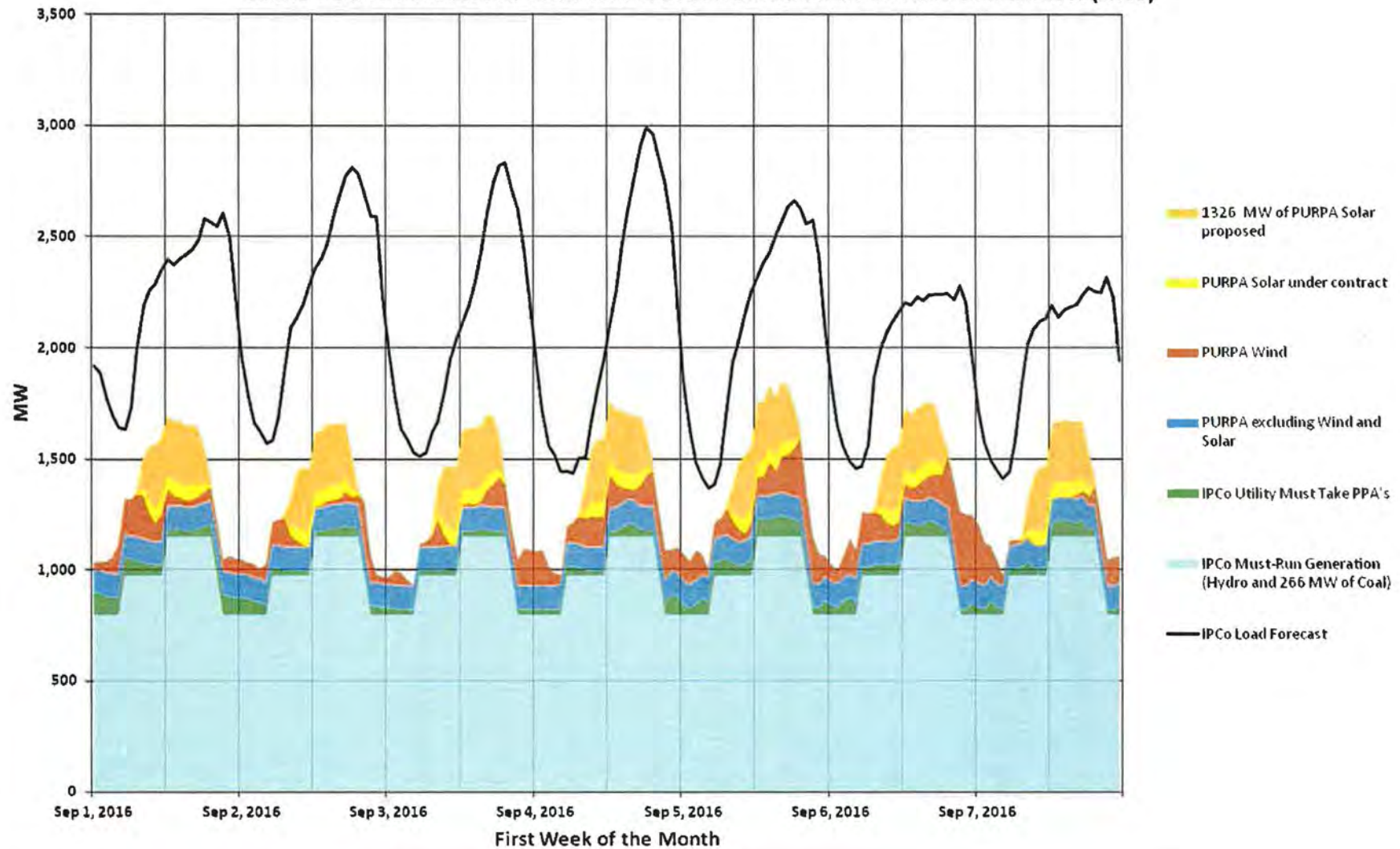
Idaho Power Forecasted Load vs. Forecasted Must Run or Take Generation (MW)

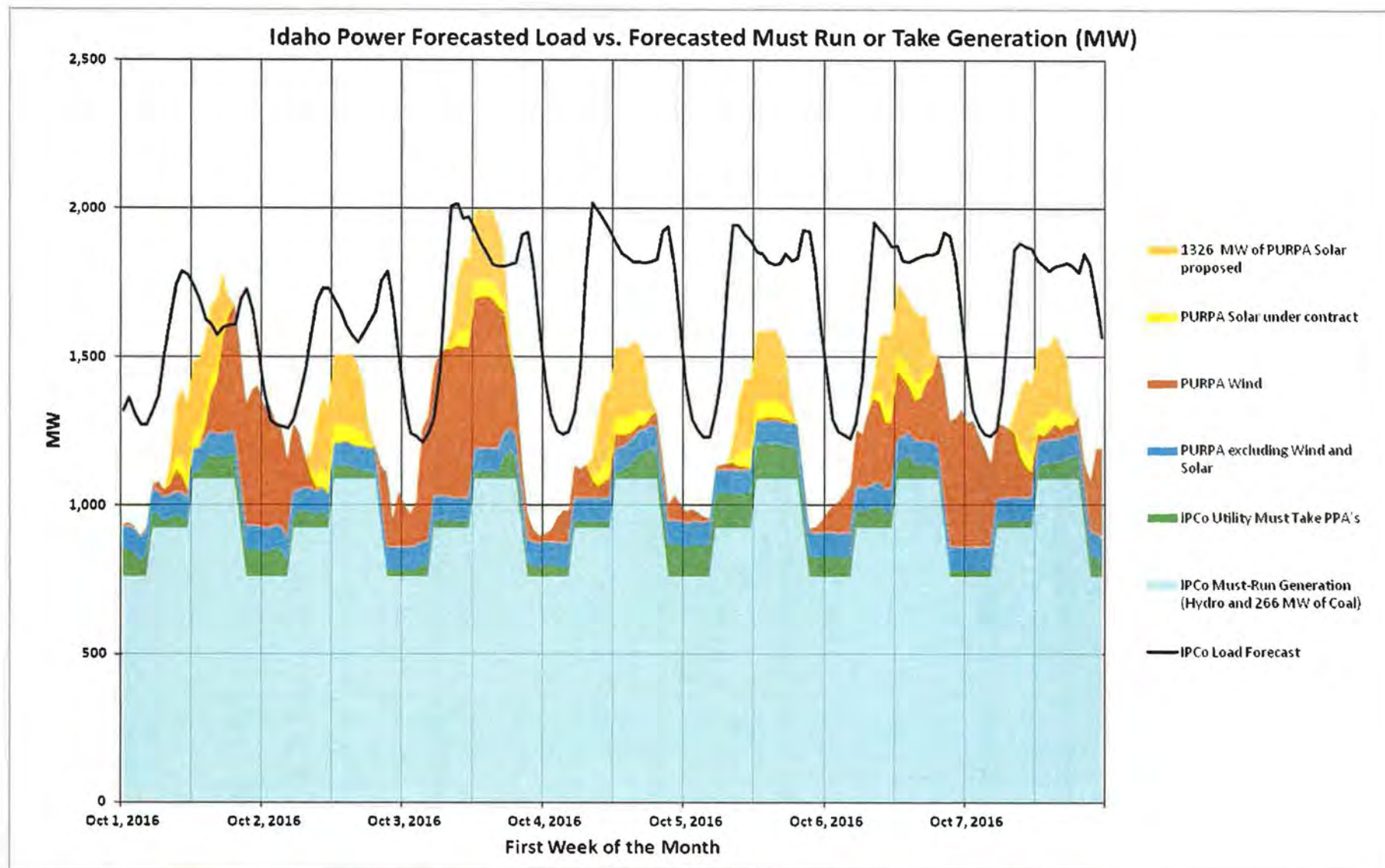




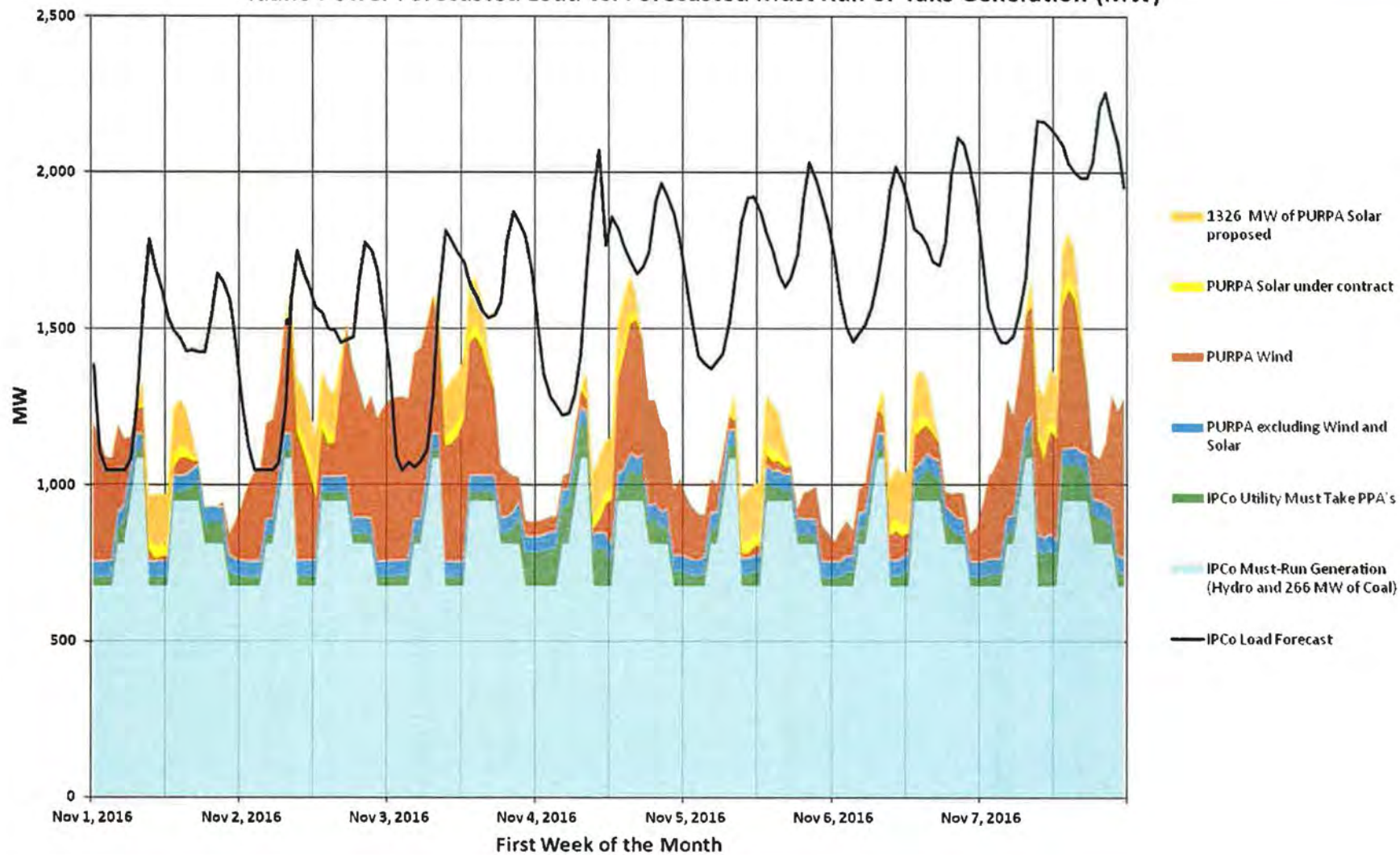


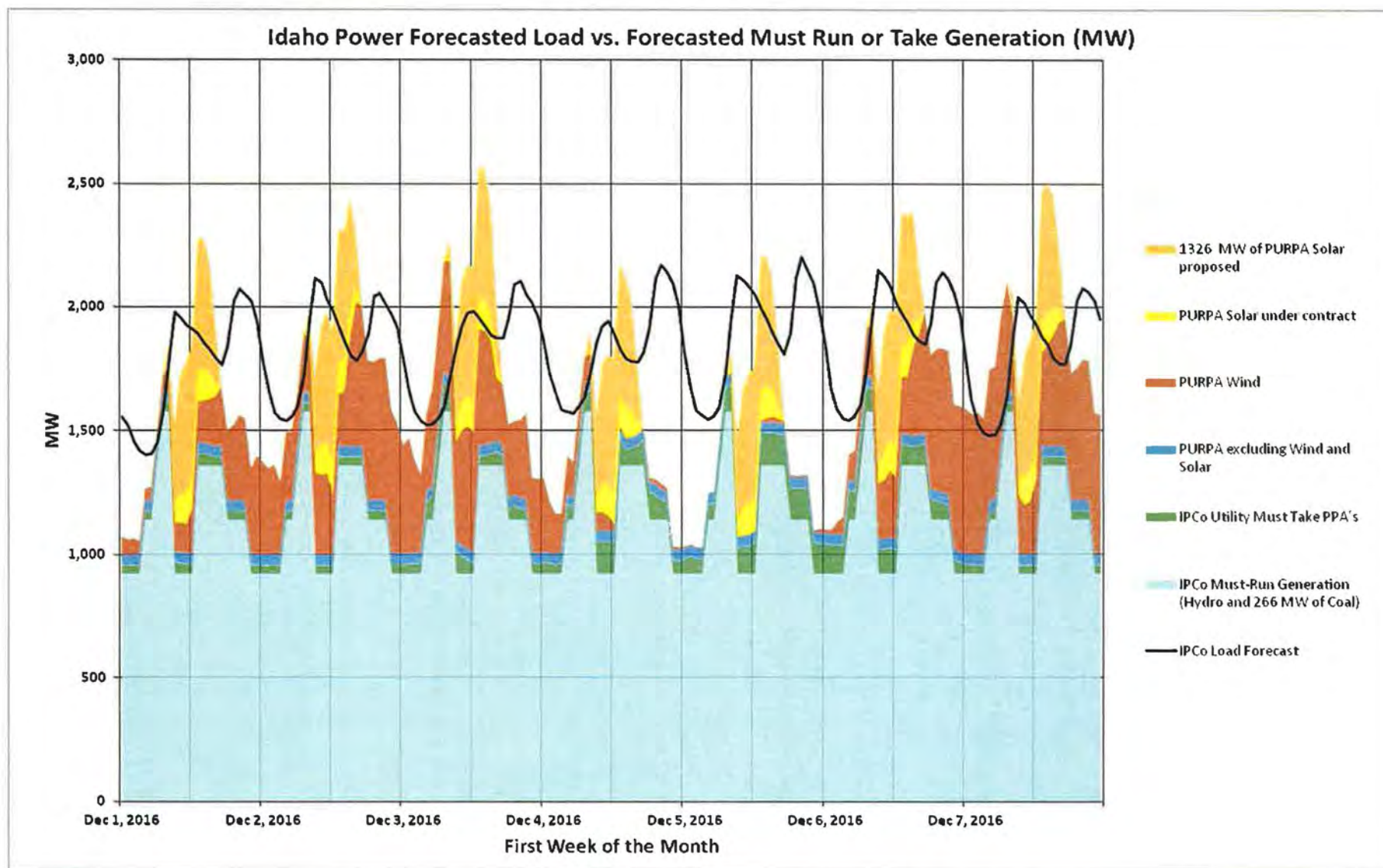
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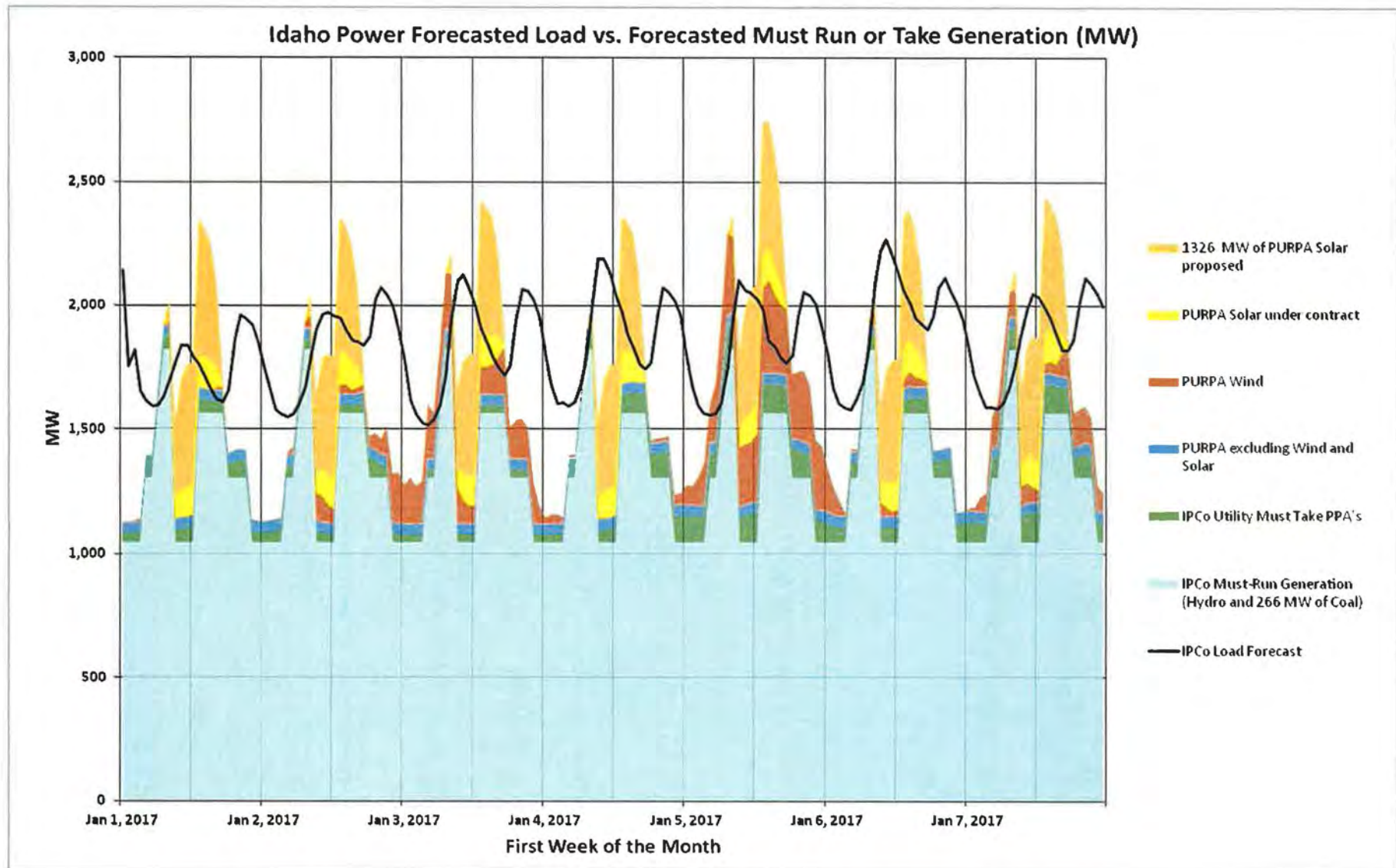




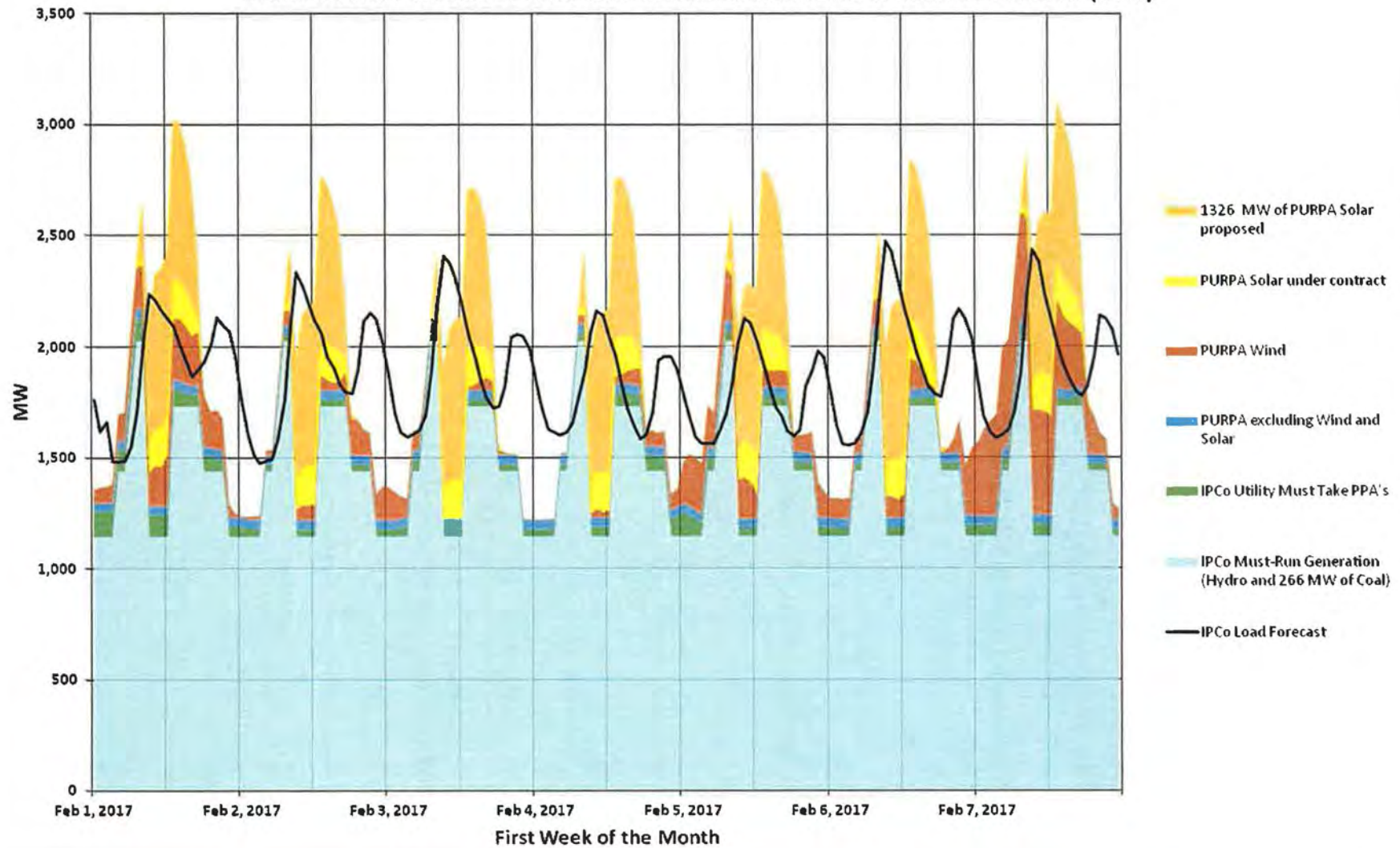
Idaho Power Forecasted Load vs. Forecasted Must Run or Take Generation (MW)



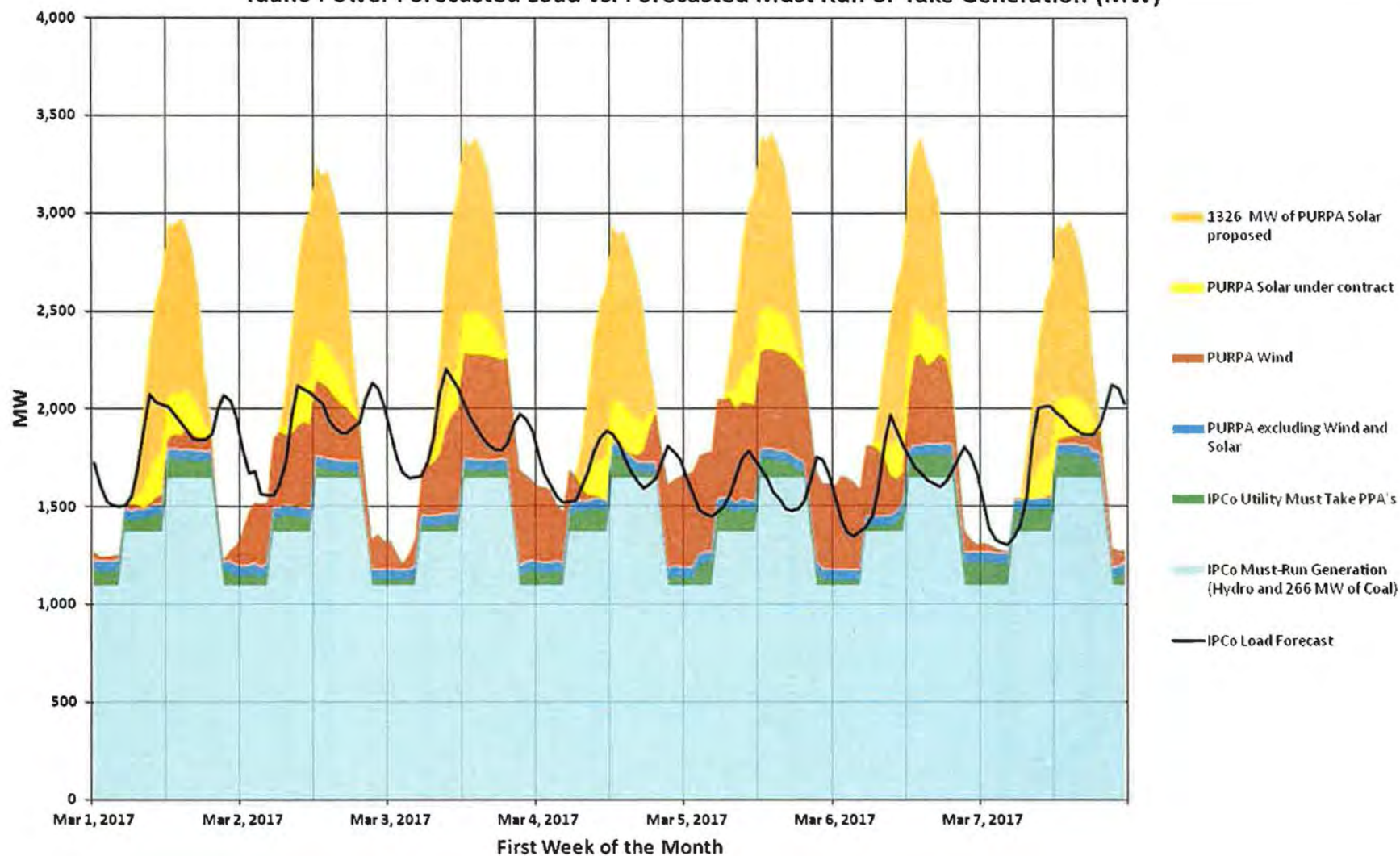




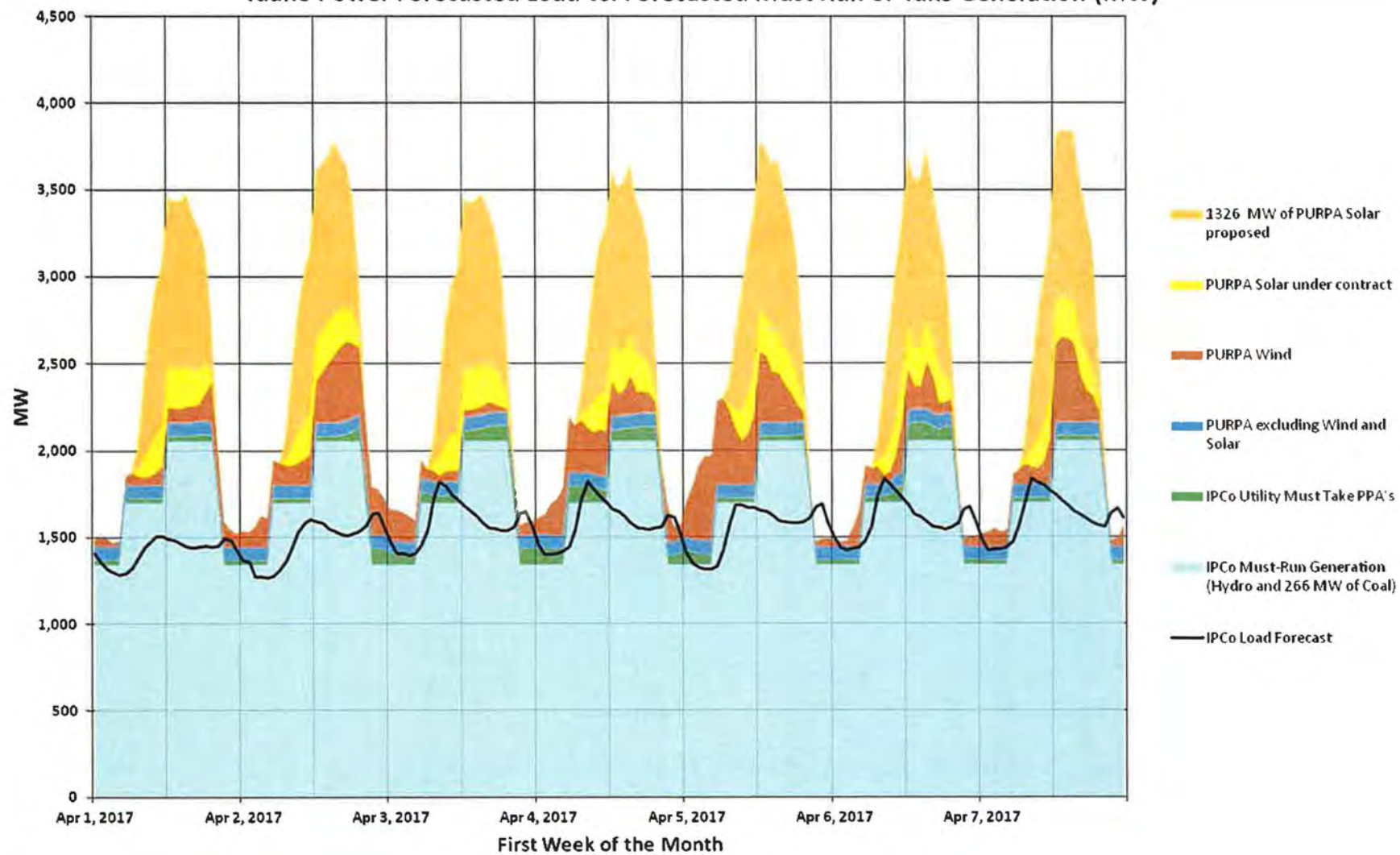
Idaho Power Forecasted Load vs. Forecasted Must Run or Take Generation (MW)



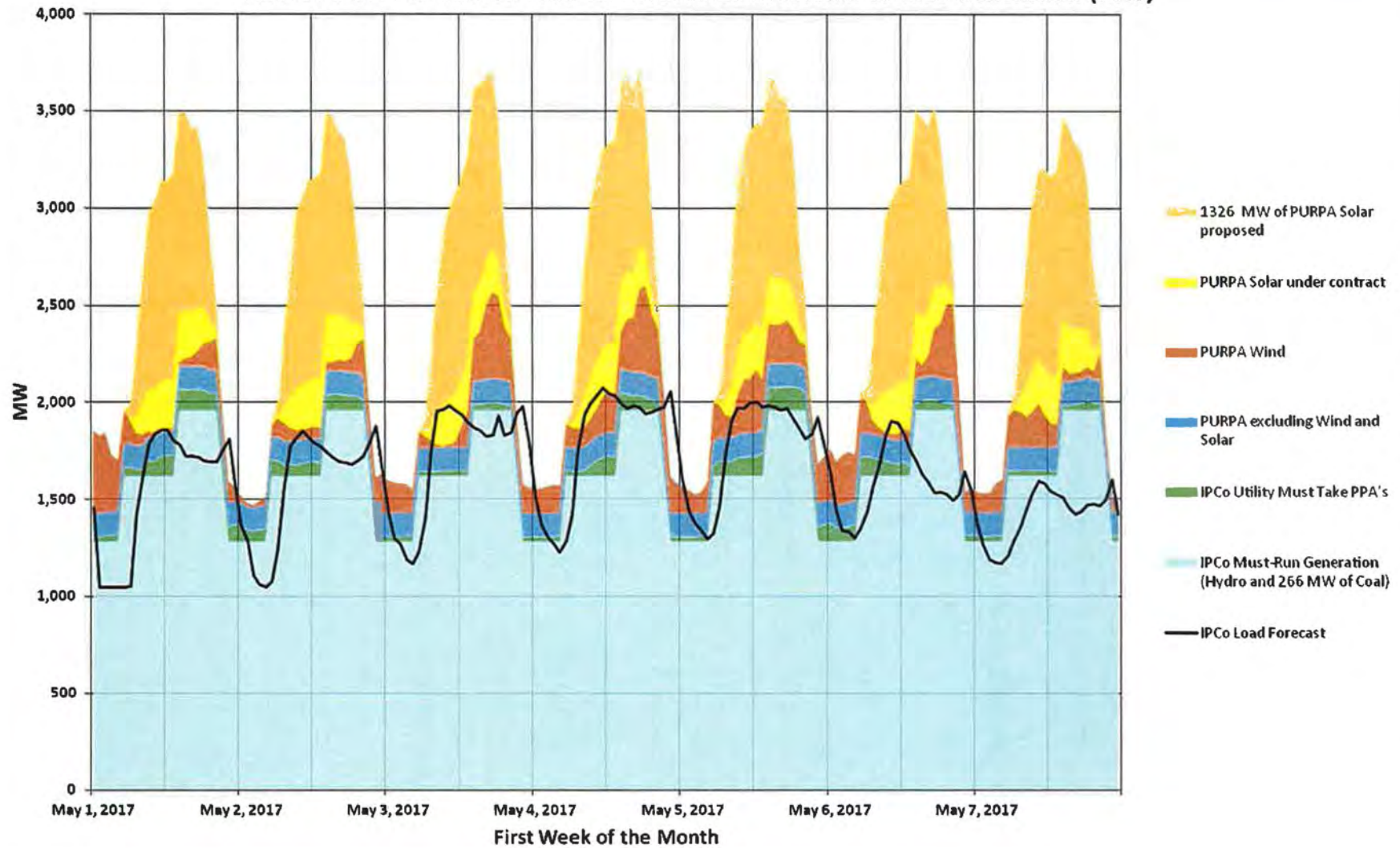
Idaho Power Forecasted Load vs. Forecasted Must Run or Take Generation (MW)

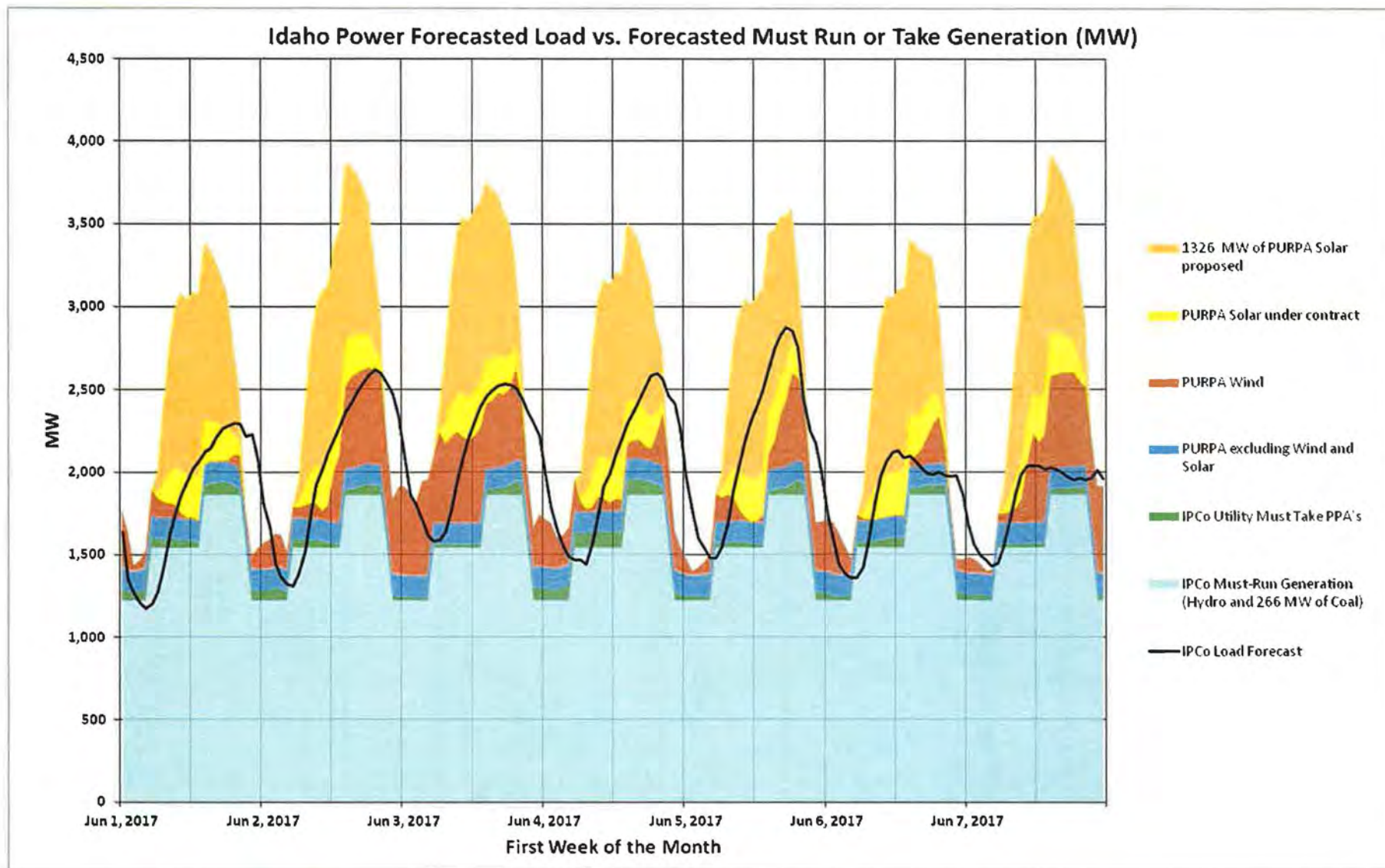


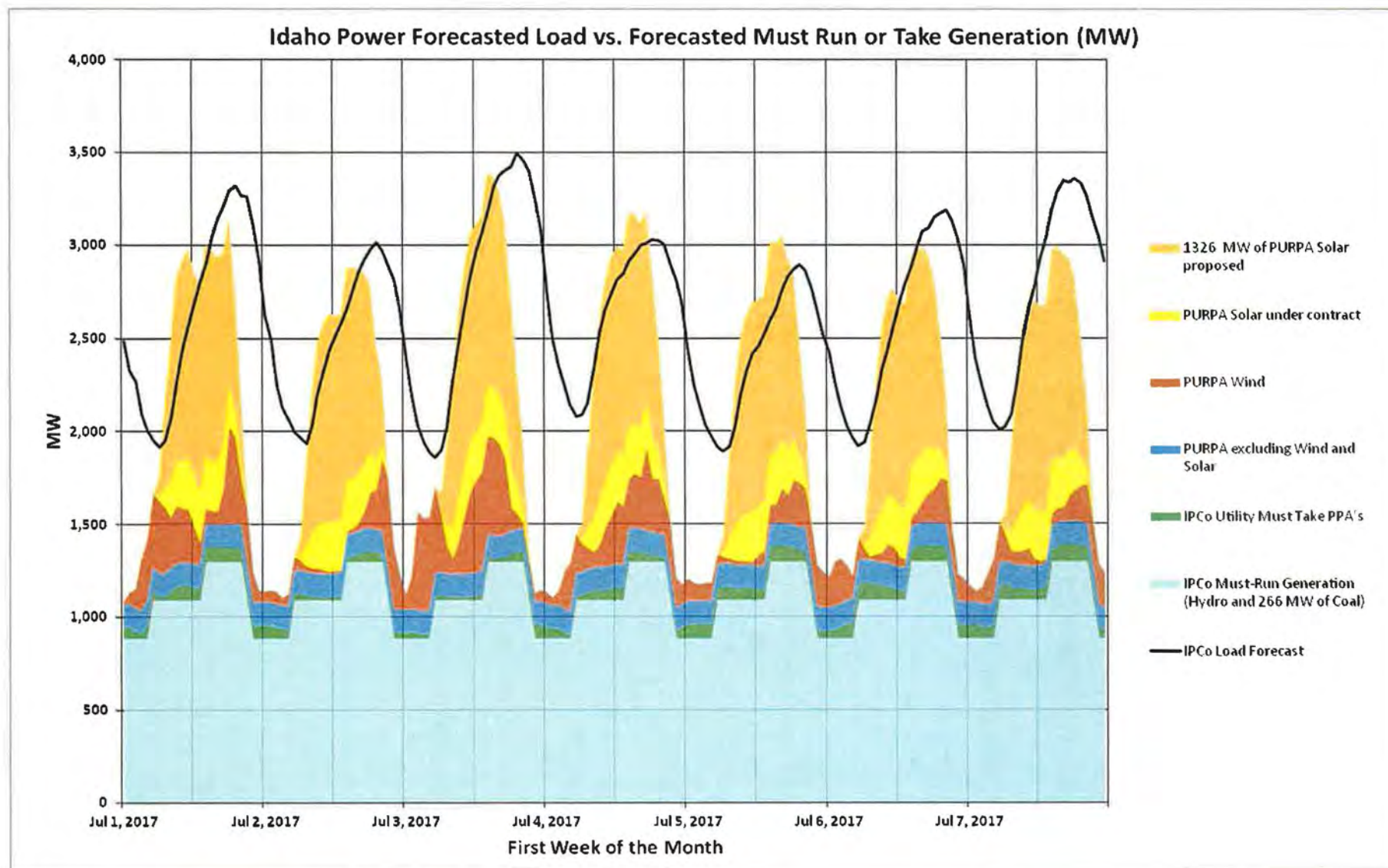
Idaho Power Forecasted Load vs. Forecasted Must Run or Take Generation (MW)

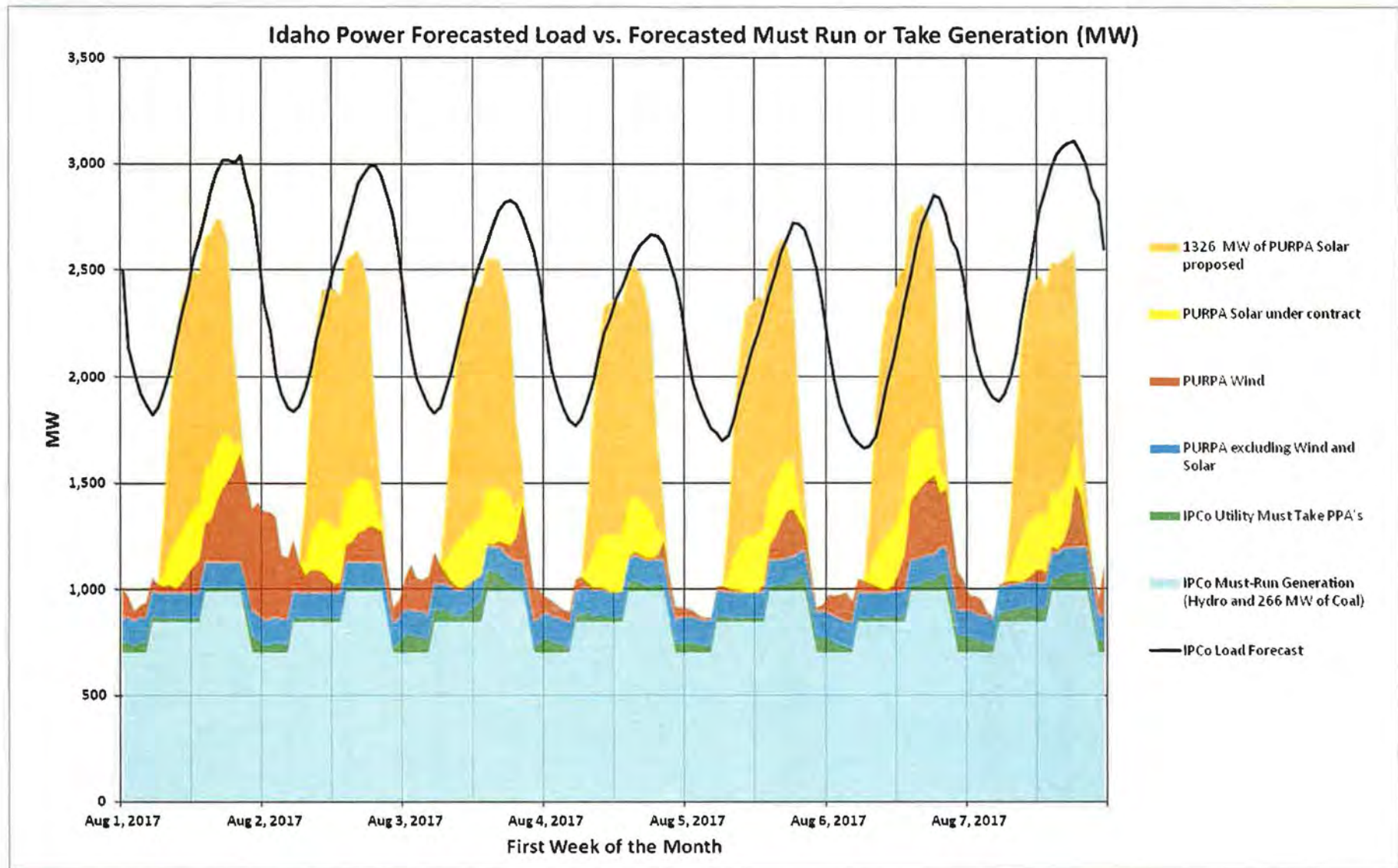


Idaho Power Forecasted Load vs. Forecasted Must Run or Take Generation (MW)

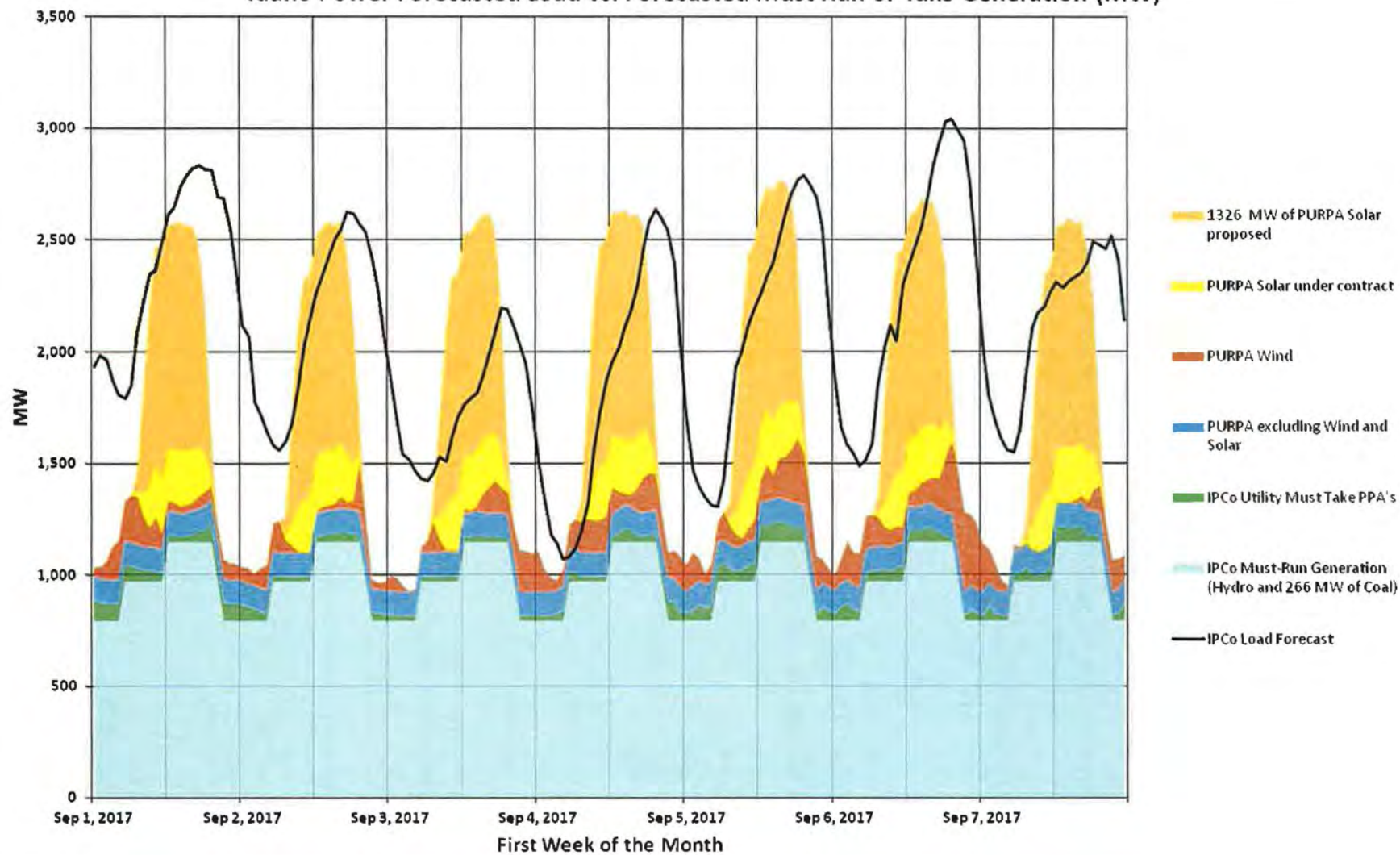


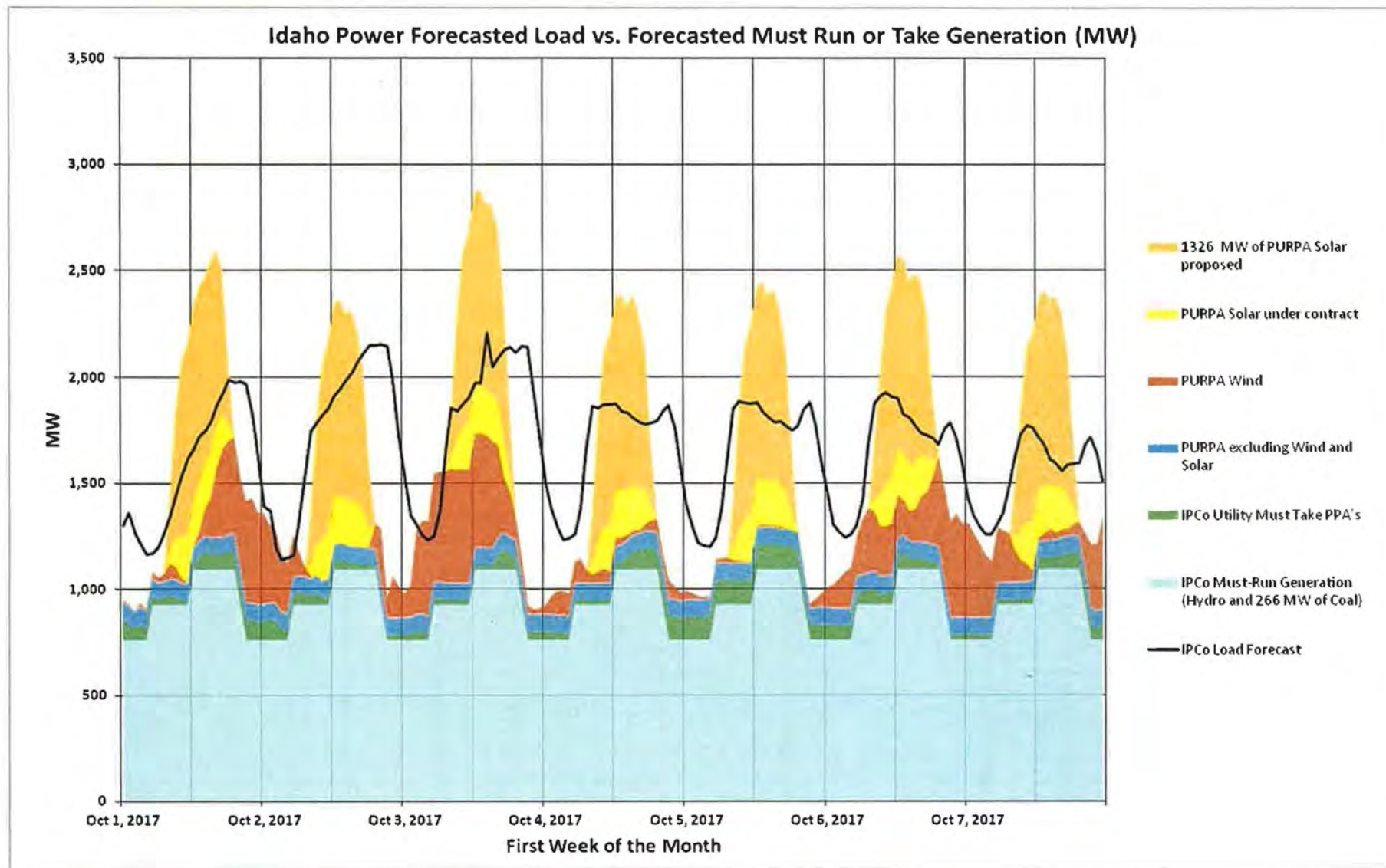


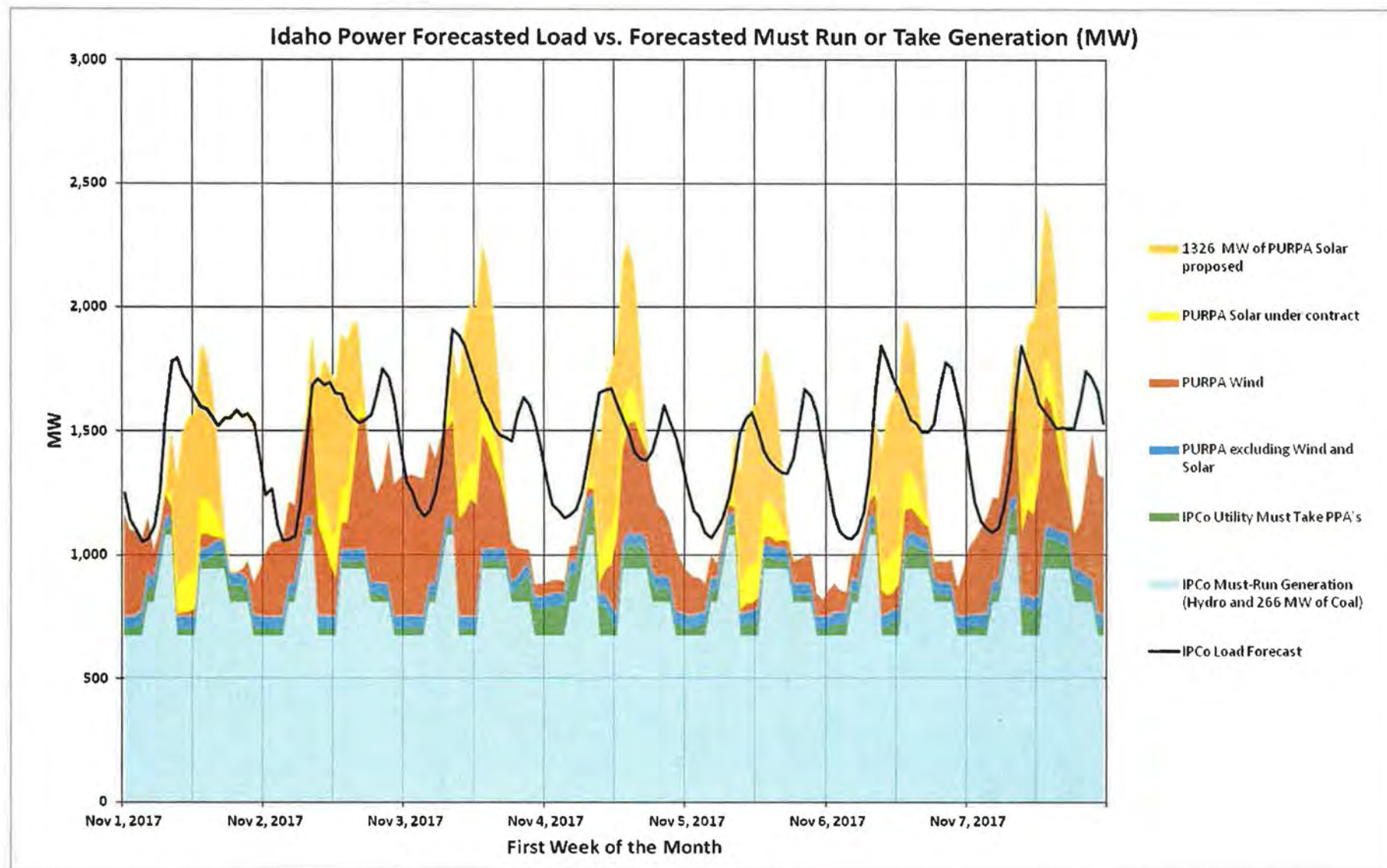


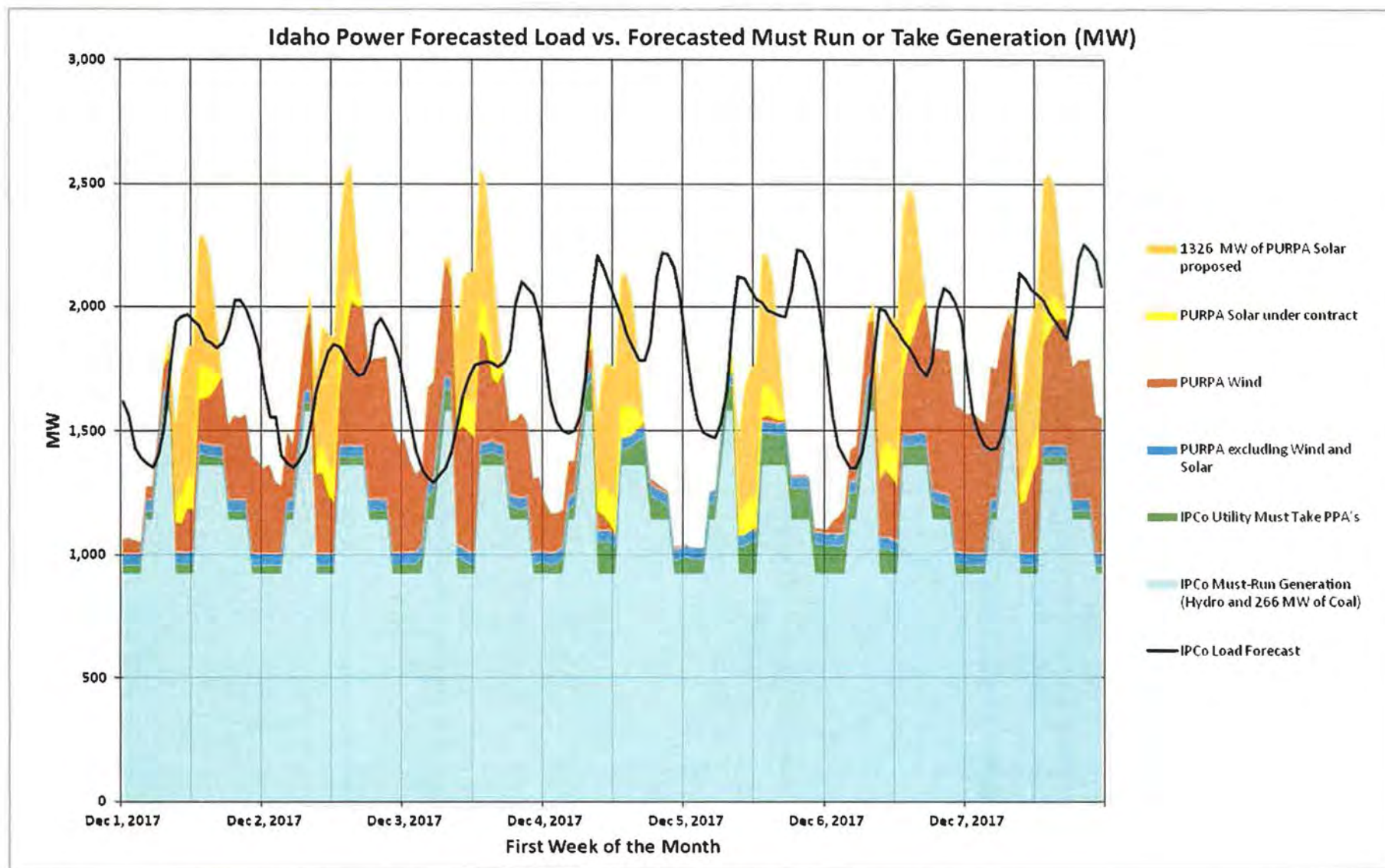


Idaho Power Forecasted Load vs. Forecasted Must Run or Take Generation (MW)









BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON

IDAHO POWER COMPANY

Exhibit Accompanying Direct Testimony of Randy Allphin

April 24, 2015

**Idaho Power Company
Cogeneration and Small Power Production**

Idaho Power/108
Allphin/1

Contract Obligations

As of April 1, 2015

	<u>Total</u>	<u>April 2015 thru March 2016</u>	<u>April 2016 thru March 2017</u>	<u>April 2017 thru March 2018</u>	<u>April 2018 thru March 2019</u>	<u>April 2019 thru March 2020</u>	<u>April 2020 thereafter</u>
Signed Contracts							
Biomass	\$129,221,409	\$10,902,003	\$11,140,739	\$11,323,374	\$9,677,415	\$8,731,528	\$77,621,623
CoGen	\$3,923,451	\$711,734	\$0	\$0	\$0	\$0	\$0
Hydro	\$315,963,828	\$29,200,128	\$29,431,439	\$29,193,303	\$28,887,665	\$26,899,782	\$172,588,768
Thermal	\$8,821,804	\$5,205,851	\$3,502,146	\$4,827	\$4,827	\$4,828	\$99,324
Wind	\$2,139,810,784	\$96,297,677	\$95,462,137	\$102,293,527	\$110,571,230	\$108,591,928	\$1,626,594,284
Subtotal	\$2,597,741,276	\$142,317,392	\$139,536,462	\$142,815,032	\$149,141,138	\$144,228,066	\$1,876,903,999
Solar	\$1,182,141,921	\$905,140	\$12,486,793	\$33,187,345	\$35,479,187	\$36,563,922	\$1,063,519,535
Total	\$3,779,883,197	\$143,222,532	\$152,023,255	\$176,002,377	\$184,620,325	\$180,791,988	\$2,940,423,534
Proposed Contracts							
Biomass	\$0						
Cogen	\$0						
Hydro	\$0						
Thermal	\$0						
Wind	\$0						
Solar	\$2,713,759,781	\$0	\$0	\$135,687,989	\$135,687,989	\$135,687,989	\$2,306,695,814
Total	\$2,713,759,781	\$0	\$0	\$135,687,989	\$135,687,989	\$135,687,989	\$2,306,695,814
Signed and Proposed							
Biomass	\$129,221,409	\$10,902,003	\$11,140,739	\$11,323,374	\$9,677,415	\$8,731,528	\$77,621,623
Cogen	\$3,923,451	\$711,734	\$0	\$0	\$0	\$0	\$0
Hydro	\$315,963,828	\$29,200,128	\$29,431,439	\$29,193,303	\$28,887,665	\$26,899,782	\$172,588,768
Thermal	\$8,821,804	\$5,205,851	\$3,502,146	\$4,827	\$4,827	\$4,828	\$99,324
Wind	\$2,139,810,784	\$96,297,677	\$95,462,137	\$102,293,527	\$110,571,230	\$108,591,928	\$1,626,594,284
Solar	\$3,895,901,702	\$905,140	\$12,486,793	\$168,875,334	\$171,167,176	\$172,251,911	\$3,370,215,349
Total	\$6,493,642,977	\$143,222,532	\$152,023,255	\$311,690,366	\$320,308,314	\$316,479,977	\$5,247,119,347

BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON

IDAHO POWER COMPANY

Exhibit Accompanying Direct Testimony of Randy Allphin

April 24, 2015

Project Name	MWac	Term (Years)	State	Scheduled Operation Date	Estimated Obligation (includes integration)	Estimated 2 year Obligation (includes integration)
Grandview PV Solar Two, LLC	80	20	Idaho	09/01/16	\$312,729,719	\$21,365,030
Boise City Solar, LLC	40	20	Idaho	01/01/16	\$156,299,294	\$10,345,906
Mountain Home Solar, LLC	20	20	Idaho	12/31/16	\$79,877,543	\$4,310,801
Pocatello Soalr 1, LLC	20	20	Idaho	12/31/16	\$74,712,956	\$4,055,563
Murphy Flat Power, LLC	20	20	Idaho	12/01/16	\$69,184,146	\$2,860,894
Simco Solar, LLC	20	20	Idaho	12/01/16	\$69,951,245	\$2,887,904
American Falls Solar, LLC	20	20	Idaho	12/01/16	\$65,313,902	\$2,621,813
American Falls Solar II, LLC	20	20	Idaho	12/01/16	\$62,494,243	\$2,378,384
Orchard Ranch Solar, LLC	20	20	Idaho	12/01/16	\$65,605,413	\$2,531,995

\$53,358,291

Project Name	MWac	Term (Years)	State	Scheduled Operation Date	Estimated Obligation	Estimated 2 year Obligation
Grove Solar Center, LLC	10	20	Oregon	12/31/16	\$37,662,243	\$2,321,359
Hyline Solar Center, LLC	10	20	Oregon	12/31/16	\$37,662,243	\$2,321,359
Open Range Solar Center, LLC	10	20	Oregon	12/31/16	\$37,662,243	\$2,321,359
Railroad Solar Center, LLC	10	20	Oregon	12/31/16	\$37,662,243	\$2,321,359
Thunderegg Solar Center, LLC	10	20	Oregon	12/31/16	\$37,662,243	\$2,321,359
Vale Air Solar Center, LLC	10	20	Oregon	12/31/16	\$37,662,243	\$2,321,359

\$13,928,155

\$67,286,446

BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON

IDAHO POWER COMPANY

Exhibit Accompanying Direct Testimony of Randy Allphin

April 24, 2015

Idaho Power Compared to Regional Renewable Portfolio Standard (RPS)/Renewable Portfolio Goal(RPG)

