

**Indicative Terms
Request for Offers
Demand Response INCs and DEC to
The Bonneville Power Administration**

Product: Decreased load (Demand Response DEC or “DR DEC”) South of the Allston cut plane (SOA) and increased load (Demand Response INC or “DR INCDEC”) north of SOA. See [Map](#) for locations of increased/decreased load. BPA expects that energy associated with DR INCs and DEC to be WSPP Schedule C firm energy. BPA is interested in purchasing DR INCs and DR DEC to directly from host Load Serving Entities (LSE) and/or through Demand Response Aggregators (Seller). Demand Resources are needed during the summer high load events.

Quantity: BPA will consider offers between 10MW* and 250 MW.

Please specify maximum amount of firm MWs Seller can provide in each month:

July 2017	August 2017	September 2017
July 2018	August 2018	September 2018
July 2019	August 2019	September 2019
July 2020	August 2020	September 2020
July 2021	August 2021	September 2021

*BPA is open to hearing from potential Sellers capable of providing Demand Resources close to 10 MW. BPA would like to see offers for aggregated Demand Resources if they are near or greater than 10MW in total and within a single host utility.

Term: Summer months only (July -September);
Minimum of one year (July 1, 2017 - September 30, 2017);
Maximum of 5 years (Summer months, 2017-2021).

Points of Delivery: Please specify details for each Demand Resource associated with offer:

Category of resource ^{1,2}	Increase ³ or Decrease load?	MW available	Point of Interconnection on LSE’s system	POR on BPA Transmission system

¹ Indicate restrictions which prevent partial deployment. (Depending upon the circumstances BPA may call on a portion, or all, of the Quantity of Seller’s accepted bid.)

² Categories: Demand response (list type); Energy storage (list storage technology); Distributed Energy Resource (list fuel).

³ Host LSE for increased loads must be located within the BPA BAA.

BPA will prioritize offers in the selection process that provide maximum, least-cost counter flow to the SOA north-south flows.

Delivery Period: Daily, Monday-Friday, 1400-2200 hours.

Minimum consecutive hours = (Seller dictates, minimum of 2.)

Maximum consecutive hours = (Seller dictates.)

Maximum deployment of one period/day and 40 hours/year.

Maximum consecutive days = (Seller dictates.)

BPA may elect to call on energy for as little as two hours of the Delivery Period, or up to the Seller-specified Maximum number of consecutive hours.

Transmission: Seller is responsible for reserving transmission to the BPA network from the LSE and to/from the BPA congestion centroid (BPAT.RD) on the BPA network pursuant to section 6 of BPA's Business Practice on Requesting Transmission Service, ([TSR for Bilateral Redispatch for Congestion Management](#).) (Decreased load reservations to the centroid, increased load from the centroid.) Such transmission reservations shall be sufficient to cover the Quantity specified in the BPA Deployment Notice(s) during the times specified in BPA's Deployment Notice(s).

BPA shall provide Seller with a billing credit for new (original) transmission reservations on the BPA network to/from the BPA congestion centroid (BPAT.RD) pursuant to section 6 of BPA's Business Practice covering Requesting Transmission Service. ([TSRs for Bilateral Redispatch for Congestion Management](#).)

Scheduling: Sellers providing increased loads within the BPA BAA (DR INC) shall schedule firm energy from the BPA congestion centroid (BPAT.RD) to Seller's POD on BPA's Transmission system in amounts and for the duration stated in BPA's Deployment Notice pursuant to Section J of [BPA's Business Practice for Scheduling Transmission Service](#) and section B of [BPA's Redispatch and Curtailment Procedures](#). Associated E-tags shall reference AREF ____ (reservation #(s) from the centroid).

Sellers providing decreased loads (DR DEC) shall schedule firm energy from the Seller's POD on the BPA Transmission system to the BPA congestion centroid (BPAT.RD) in amounts and for the duration specified by BPA in the Deployment Notice pursuant to Section J of [BPA's Business Practice for Scheduling Transmission Service](#) and section B of [BPA's Redispatch and Curtailment Procedures](#). Associated e-tags shall reference AREF ____ (reservation #(s) from the centroid to the BPA POR).

For decreasing loads (DR DEC) associated with Load Serving Entities (LSEs) that are load following customers of BPA, BPA will schedule energy from the BPA Point of Receipt with the LSE to the BPA congestion centroid. Associated E-tags shall reference AREF ____ (reservation #(s) from the centroid).

For increasing loads associated with LSEs that are load following customers of BPA, BPA will schedule Federal energy from the congestion centroid to the BPA Point of

Delivery for the LSE. Associated E-tags shall reference AREF ____ (reservation #(s) from the centroid).

Sellers who are not host LSE⁴ shall contract with the host LSE(s) to deliver, reserve all required transmission and schedule all required firm energy to the BPA congestion centroid (decreased load) or from the BPA congestion centroid (increased load) in the quantities and duration provided by BPA in its Deployment Notice pursuant to Section J of BPA's Business Practice for Scheduling Transmission Service.

Pre-scheduling will be pursuant to the WECC Preschedule Calendar. Scheduling will be done in accordance with all relevant NERC standards, NAESB Business Practices, WECC Standards, WECC Regional Business Practices, and appropriate Transmission Provider's tariff and Business Practices.

Price/Payment: Sellers should provide indicative prices for capacity (\$/kw-mo) and, for DR INC only, energy (\$/MWh).

BPA will consider heat rates indexed to gas, or fixed and indexed energy pricing.

(Specify applicable Energy Index ____; Gas Index: Malin or Stanfield.)

Deployment Notice: 90 minute notice, or 5:30 am on the WECC Preschedule day.

(BPA is indifferent to either choice of Deployment Notice. Seller to specify which notice period is applicable when bidding.)

BPA will notify Seller of its need for DR INCs or DR DECs on a recorded telephone line or through other mutually acceptable means.

Deployment Notice shall clearly state start and stop times, which shall be in whole hours, and the Quantity needed each hour (not to exceed the Quantity listed by Seller (above)). Dispatch will be in hourly blocks consistent with WECC schedules.

Information Systems:

Seller shall allow BPA real-time access to 1-minute metered data from participants load(s) and, if applicable, generation data - at BPA's sole expense. Seller's performance shall be provided to BPA either by Open ADR 2.0a or b, ICCP, or some other mutually agreed upon method



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BPA shall have audit rights to metered data from all customer sited resources under this agreement.

⁴ "host LSE" is the utility whose service territory includes the Demand Resource.

Baseline and Performance Evaluation Method: BPA requires the Seller to provide Committed Load Reduction (or load increase) in MW. Performance and a Baseline in MW for each Demand Resource. The Baseline is calculated using each Demand Resource's historical metered Demand values during the Delivery Period. The historical period of metered Demand used to establish the Baseline may vary from 5 to 15 days. Sampling is not permitted and actual meter values will be used without any Baseline adjustment.

Sellers may compute the Baseline using:

- Simple averages;
- Weighted averages;
- Averaging the highest X of Y days, i.e. 5 days out of the previous 10 program days. (At least 50% of the number of days included in the Baseline period Y shall be included in the X value when this Baseline method is used.);
- Maximum values;
- Regression;
- Discarding the lowest and highest values during the Baseline period, or
- Other mutually agreed upon methods.

Verification

For each Demand Resource the Seller shall provide the following:

- 1) The actual historical meter data used to compute the Baseline.
- 2) The computed Baseline including the formula used and the result.
- 3) The Committed Load Reduction or load increase in MW.
- 4) A performance verification test that demonstrates the Demand Resource achieved or exceeded the Committed Load Reduction during a test.

Performance:

The average of the Total Actual Load Reduction or Increase in each 1-minute interval during each thirty (30) minute period of the deployment shall equal or exceed the Seller's Committed Load Reduction or Increase. After-The-Fact Metering shall be used to measure the performance of deployment. The Seller's Total Committed Load Reduction or Total Committed Load Increase is the sum of the Committed Load Reductions or Increases for each of the Seller's Demand Resources that have substantially the same effectiveness to resolve SOA north-south flow. The Actual Load Reduction or Actual Load Increase shall be calculated by subtracting each Demand Resource's actual average metered demand in each 1-minute interval of the deployment from the Demand Resource's Baseline. The Total Actual Load Reduction or Increase is the sum of the 1-minute interval Actual Load Reduction or Increase for the Seller's Demand Resources that have substantially the same effectiveness to resolve SOA north-south flows.

Non-Performance:

If a deployment does not meet the performance standard set forth in the agreement and such non-performance is not due to an Uncontrollable Force, then the deployment shall be considered a "non-performance event." BPA reserves the right to determine in its sole discretion if an event is a non-performance event. The first non-performance event shall result in the Capacity portion of the payment for that month being withheld. In the event there is a second non-performance event, BPA has the unilateral right to terminate the agreement without penalty. BPA reserves the right to determine if an event is a non-performance event based upon the requirements set forth without consulting the deploying party.

Uncontrollable As defined in the WSPP Agreement, in the event the service is forced off- **Force:** line or is expected to remain off-line as a result of an Uncontrollable Force, the supplier shall make best efforts to notify BPA of such an event.

Contract Requirement: If Seller is not a LSE served by BPA, then Seller or Seller’s scheduling representative shall have an active Transmission Services Agreement.

Acceptance: The RFO will close on May 26, 2016.

BPA will notify parties whose indicative offers are considered best qualified within 30 days of closing the RFO after which, selected parties will have 3 business days to provide BPA with their best and final offer. BPA expects to execute final agreements by December 31, 2016.

Selection will be highly correlated with price, adjusted for Point of Delivery, and in consideration with BPA’s credit requirements.

Dispute Resolution: Any disputes that arise under this Agreement are subject to binding Arbitration, if prior to initiating any such binding arbitration, the parties draft and sign an agreement which shall meet the requirements of the Administrative Disputes Resolution Act of 1996, 5 U.S.C. §§ 571-584, including the requirements to set forth the precise issue in dispute, the amount in controversy and the maximum monetary award allowed. Such agreement shall take precedence over any conflicting provisions contained in Section 34 of the WSPP Agreement. Under no circumstances shall specific performance be an available remedy against either party in arbitration.

Other Considerations:

- 1) BPA reserves the right to accept multiple offers, or accept no offers. (BPA suspects that it will need to make several awards as INC and DEC deployments must be matched to relieve congestion.)
- 2) Demand Side Management may require one-off contracts.
- 3) For evaluation purposes, BPA will assume all Demand Side Management with a POD south of Malin will be delivered at Malin.
- 4) BPA must pair INCs with DECs with the goal of being energy neutral. As such, some offers may be deployed more frequently than others.
- 5) This Term Sheet is for illustrative purposes. Final terms subject to bilateral agreement.
- 5)6) Demand Resources may be in any Balancing Authority Area and may include loads in all end use sectors (commercial, industrial, irrigation, residential and public facilities/buildings).

Disclaimer and Confidentiality

BPA intends to summarize information obtained from Respondents to evaluate the effectiveness of non-wires solutions to relieve north to south congestion across the South of Allston cut plane. The information obtained as a result of this Request for Offers may be used to evaluate the effectiveness and cost benefit analyses of related programs. Only non-merchant BPA staff in Transmission and Power will have access to the Offers.

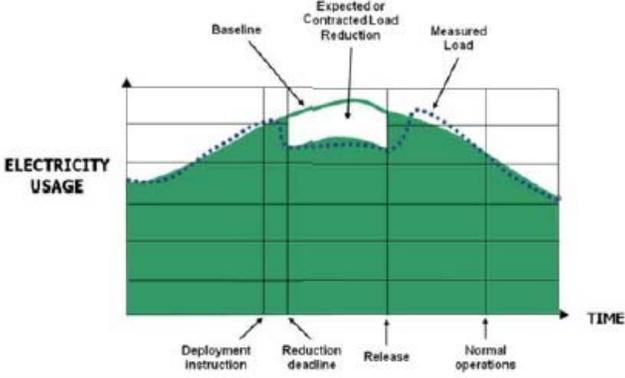
It is not BPA’s intent to publicly disclose individual Respondent proprietary information obtained in response to this RFO. To the full extent that it is protected pursuant to the Freedom of Information Act and other laws and regulations, information identified by a Respondent as “Proprietary” or “Confidential” will be kept confidential. While this RFO is intended to provide information for BPA to

select an offer it should NOT to be construed as a commitment by BPA to enter into a contractual agreement, nor will BPA pay for information solicited.

Dodd-Frank Reporting Requirements

Each Party represents to the other that the transaction reflected in this Confirmation Agreement is a Physically Settled Option, is intended to be physically settled and meets all the requirements of and is subject to the agreements and warranties contained in Section 36 of the WSPP Agreement for purposes of qualifying for the trade option exemption, 17 C.F.R. Section 32.3.

Definitions of terms used in this Term Sheet

Actual Load Reduction (ALR)	The amount of Demand Response provided by the Seller during the Deployment Period calculated by subtracting the Demand Resource’s interval Load during the Deployment Period from the Demand Resources’ Baseline. The Seller’s Deployment performance is measured against sum of the Committed Load Reduction for all of the Seller’s Demand Resources located within the same LSE’s service territory. A shortfall in ALR from a Demand Resource that is part of an Aggregated Demand Resource can be made whole by another Demand Resource whose ALR is greater than it’s Committed Load Reduction.
Aggregated Demand Resource	A group of independent Load facilities that provide Demand Response services as a single Demand Resource.
Baseline	A method of estimating the electricity that would have been used by a Customer or Demand Resource in the absence of a Demand Response Event. It may be calculated using interval metering (Baseline Type 1) and/or statistical sampling (Baseline Type II). The figure below illustrates the concept of Baseline relative to a Demand Response Event. 
Committed Load Reduction (CLR)	The quantity of Demand Response Load Increase or Demand Response Load Decrease offered by the Seller and requested by BPA in the Deployment Notice.
Demand	The rate at which electric energy is delivered to or by a system or part of a system, generally expressed in kilowatts or megawatts, at a given instant or averaged over any designated interval of time; and the rate at which energy is being used by the customer (NERC Definition).
Demand Resource	A Load or aggregation of Loads capable of providing measurable and verifiable Demand Response.
Demand Response	A temporary change in electricity usage by a Demand Resource in response to market or reliability conditions. For purposes of these standards, Demand Response does not include energy efficiency or permanent Load reduction.
Distributed Energy Resources (DER)	DERs are small, modular, energy generation and storage technologies that provide electric capacity or energy where it is needed. DERs may be either connected to the local electric power grid (e.g., for voltage support) or isolated from the grid in stand-alone applications, such as part of a MicroGrid. Definition of DER provided by the Department of Energy, http://www1.eere.energy.gov/femp/pdfs/31570.pdf
Load	An end-use device or customer that receives power from the electric system (NERC Definition).