

# Proposed Community Solar Rate Rider: Schedule No. 500

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Planning & Analysis

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# Objective

- Maintain a trusted energy partner relationship by developing a Community Solar Program (CSP) that will provide a solar option for all customer classes
- Design program fully funded by participating customers to ensure five-year no general rate increase
- Meet OPPD's mission to provide affordable, reliable, and environmentally sensitive energy services

# Strategic Directives

- SD-1 Strategic Foundation
  - Opportunity for the District to be viewed as innovative and “Leading the Way We Power the Future”
  - Exemplify fiscal, social and environmental responsibility
- SD-2 Competitive Rates
  - Elective program priced at market value to pass along the cost and market benefits to participants
- SD-5 Customer Satisfaction
  - Improved customer satisfaction scores from customers who want OPPD to offer community solar
- SD-13 Stakeholder Outreach and Engagement
  - Provide meaningful ways for customer-owners to participate and provide feedback

# Pricing Design Principles

- Market research resulted in diverse pricing and program structures
- Consistent with SD-2:
  - Maintain fair, reasonable and non-discriminatory rates as stated in Nebraska Revised Statute § 70-655
  - Equitably assign costs across and within all customer classes
  - Pursue rate process and structure changes to reflect the cost of energy when it is used
  - Offer flexibility and options
  - Ease of understanding

# Pricing Options Evaluated

- Various types of community solar pricing methodologies

	Method Overview
Embedded Cost of generation	Assumes equal capacity credit to baseload units
Full Retail Rate	Assumes all the benefits to reducing load
Value of Solar	Diverse interpretations and calculation methodologies
<b>Market Based Rate</b>	<b>Market values allow participants to realize the market benefits and costs of the elective program</b>

# Proposed Market Based Rate

- Transparent and based on actual production and prior year Southwest Power Pool (SPP) day-ahead market pricing
- Valuation is consistent with how the market values current and future OPPD generation assets
- The proposed rate rider would be scalable to accommodate potential future states of large scale adoption of additional community solar projects or distributed energy resources
- Rate is 'portable' and can be retained through a customer relocation in our service territory
- The Board's rate consultant, Brattle, agrees that this methodology is compliant with reasonable and prudent ratemaking principles

# Community Solar Charge Summary

## Community Solar Charge

*Community Solar Charge = Market Based Value of Solar \* Subscription Level*

### Definitions:

*Subscription Level* is defined as quantity of Community Solar Share(s).

A *Community Solar Share* is defined as 100 kWh per month.

The *Market Based Value of Solar* is calculated on a per share cost and is the cost of the interconnected community solar purchase power agreement (PPA) less both the market value of energy and capacity.

# MARKET RESEARCH & STAKEHOLDER ENGAGEMENT



# Qualitative Research

- Qualitative (Directional)
  - Ongoing Community Expert Involvement
    - Simplicity, transparency, and availability to all customers are important
    - Project size is not critical
    - Visibility may be physical or virtual
    - Affordability and educational value is needed
- Customer Power Panel Online Chats (Panel Phase I)
  - Program Funding – participants were split between funding by program participants and all customers
  - Program Participation – Demographics
    - Environmental supporters
    - Higher income

# Quantitative Research

- Quantitative (Projectable)
  - Customer Power Panel (Panel Phase 2)
  - Demand
    - Price inelastic across tested package options
    - Pay-As-You-Go model showed greater demand than Pay Upfront financial model
  - Participation terms not critical
  - Physical location not critical
  - Program Funding - Split 53%-39% between 1) program participants; and 2) all customers

# OPPDListens

# Customer & Media Contacts

February 13 thru March 11

- Media Contacts
  - Midwest Energy News, KIOS-FM, Omaha Public Radio
  - 7 published articles
  - 2 OPPD press releases
- Google Analytics
  - 616 page views
  - 520 unique page views
- Customer Comments & Engagement
  - 16 customer comments (13 via OPPDListens.com and 3 via Board email)
  - Twitter – 225 mentions, 117 retweets, 4,381,137 impressions
  - Facebook – 5,858 Facebook accounts reached, 233 clicks, 8 shares

# Update - Shares Approach

- Based on customer feedback to simplify the process, a shares approach was pursued
- Shares approach defined as allowing customers to sign up for a fixed annual volume of community solar kWh
- 1 share of community solar = 100 kWh per month
- Benefits of a shares approach
  - Ease of customer understanding
  - Ease of utility tracking and billing
  - Volume of participation is predictable
  - Size shares like you would size DIY
- Account executives and call center representatives will educate interested participants

# Proposed Commitment Length

- Enrollment deposit refundable after:
  - 5 years continuous participation for residential customers
    - Customers taking service under Schedules 110, 115, 119
  - 10 years continuous participation for commercial customers
    - Customers taking service under Schedules 226, 230, 231
  - 20 years continuous participation for industrial customers
    - Customers taking service under Schedules 232, 240, 245, 250, 261 and 261M

# Example Customer Bill Calculation\*

- Residential bill comparing participation in community solar to baseline bill (non-participant)
- Tax benefits from community solar are passed on to participants through Power Purchase Agreements

Sample Monthly Customer Bill at 1,000 kWh and 1 share participation			
	Calculation Line	Customer Bill: Participant	Customer Bill: Non- Participant
2019 Service Charge		\$30.00	\$30.00
Energy Charge	$\$0.085 * 1000 =$	\$85.00	\$85.00
Community Solar Charge**	$\$2.00 * 1 \text{ share} =$	\$2.00	
<b>Total</b>		<b>\$117.00</b>	<b>\$115.00</b>

\*Does not show FPPA, image is for illustrative purposes & forecasted value of FPPA is shown in the energy charge component

\*\*Community Solar Charge = Market Based Value of Solar \* Subscription Level



# Sample Annual Summary\*

- Customer Profile equals 12,000 kWh annually or an average of 1,000 kWh per month
- 1 Share to equal approximately 100 kWh monthly

	J	F	M	A	M	J	J	A	S	O	N	D
kWh	949	820	750	605	850	1,100	1,550	1,770	1,400	800	702	704
Service	\$30	\$30	\$30	\$30	\$30	\$30	\$30	\$30	\$30	\$30	\$30	\$30
Energy Charge \$	\$81	\$70	\$64	\$51	\$72	\$94	\$132	\$150	\$119	\$68	\$60	\$60
Solar Charge \$	\$2	\$2	\$2	\$2	\$2	\$2	\$2	\$2	\$2	\$2	\$2	\$2
<b>Total \$</b>	<b>\$113</b>	<b>\$102</b>	<b>\$96</b>	<b>\$83</b>	<b>\$104</b>	<b>\$126</b>	<b>\$164</b>	<b>\$182</b>	<b>\$151</b>	<b>\$100</b>	<b>\$92</b>	<b>\$92</b>



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# NEXT STEPS

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- Seek board approval for community solar rate rider
- Review developer proposal responses
- Develop program details and marketing plan
- Check in with stakeholders
- Report back to the Board the award of the community solar Purchase Power Agreement (PPA )
- Report to the Board program details