



40 JANSEN CT • WEST HARTFORD, CT 06110  
860.232.4814 (O) • 860.236.5326 (F) • INFO@SACKENERGYCO.COM

## 2020 APS Minimum Standard Review Stakeholder Questions Sack Energy Responses

1. What are the benefits of the APS program to ratepayers, including but not limited to economic, environmental and societal benefits?

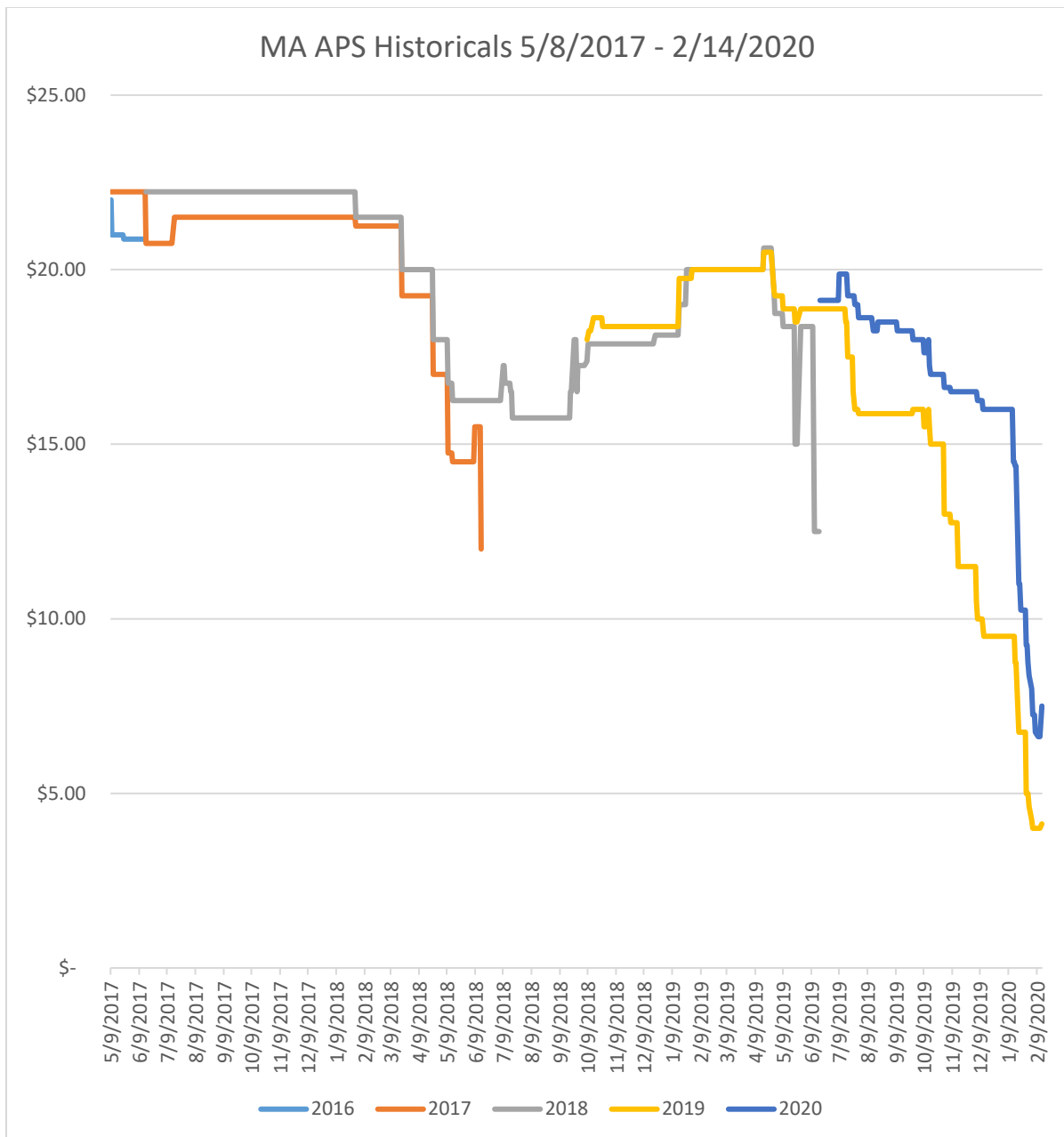
*The APS program allows alternative clean energy to become a cost-effective way to reduce greenhouse gas emissions. With the use of biodiesel, the reduction in GHGs is generated locally, thereby creating a positive environmental impact in the state of Massachusetts. In addition, it keeps local people employed as the biodiesel is produced, delivered and consumed in New England.*

3. Do you believe the APS program should prioritize technologies which provide the most benefits, such a greatest greenhouse gas emission reductions?

*Yes, the APS program should prioritize these technologies like biodiesel, it provides GHG reduction with no other costs to the consumer. When comparing an electric heat pump vs. Biodiesel, the consumer has over \$15,000 in upfront costs today to install an Electric Heat Pump but using Biodiesel there are no upfront costs. Also Bioheat will decrease GHG's immediately unlike an Electric Heat Pump, in the long run Biodiesel will get to zero GHG much sooner than the electric grid will at a fraction of the cost. If you compare the implementation of air-source heat pumps, it averages \$20,428 per customer (\*per the residential electrification case study by Diversified Energy Specialists \*\*case study included in this response). In addition, there is a significant difference in costs to run an Electric Heat Pump vs Bioheat using Biodiesel, which the attached document "Heating Comparison Calculator" from Eversource shows the cost to run an Electric Heat Pump is twice what Oil costs.*

4. From 2015 through present, what have been the average quarterly Alternative Energy Certificates (AECs) sale prices?

*See chart below for historical AEC sale prices from 5/8/2017 through 2/14/2020. The chart details the average sales price at 5/8/2017 at more than \$20.00 per AEC, to a low of \$4.00 per AEC on 2/7/2020, showing a steady decline of AEC values over the past 3 years.*



5. Is the current APS minimum standard and the annual rate of increase adequate? Please include details and any data supporting why or why not, where possible.

*The current rate of increase is not sufficient, as the current value of a 2020 AEC is around \$3.00. The market is oversupplied, and specific to biodiesel, participants are exceeding the caps, which is causing a proration as well as a dramatic decrease in the AEC value. We are suggesting that the program have an immediate increase to the minimum standard of 2% and the annual increase thereafter be at 0.35%. By doing this there will be limited over supply of AECs created yearly and simple supply and demand economics will take effect and increase AEC values.*

6. Do you anticipate a growth or decline in the supply of AECs in the APS program over the next 5 years? 10 years? If so, how would you quantify this increase in growth rate? Please include details and any data supporting your conclusions.

*If the APS program does not make any changes, we anticipate a decline in the supply of AECs. Because of decreases in AEC values and continuing value losses, program participation will diminish dramatically because the financial incentive will be insufficient to cover added costs.*

7. Are there modifications to the APS program that could be made to reduce the volatility of the APS market?

*Yes, there are ways to stabilize prices. The value of an AEC is a simple calculation; take the ACP price vs supply and demand and that will drive the value of an AEC. If all technologies are prorated to match 100% of compliance obligation and eliminate all technology caps, this will increase the value of an AEC with the elimination of oversupply. As an example the chart below shows that if there is a 15% reduction in AECs received the value of an AEC requires an increase of \$1.76 to receive the same aggregate value. It is our belief that if supply and demand economics are used the value of an AEC should be around 10% below the ACP. This will result in driving up the AEC value today to around \$19 from \$10 and result in increased total value to all technologies.*

		ACE Value	total recived	ACP 2020	Projected Value	additional income
pro rate	100,000	\$10.00	\$1,000,000.00	\$23.50	\$19.00	\$900,000.00
5%	95,000	\$10.53	\$1,000,000.00	\$23.50	\$19.00	\$805,000.00
10%	90,000	\$11.11	\$1,000,000.00	\$23.50	\$19.00	\$710,000.00
15%	85,000	\$11.76	\$1,000,000.00	\$23.50	\$19.00	\$615,000.00
20%	80,000	\$12.50	\$1,000,000.00	\$23.50	\$19.00	\$520,000.00
25%	75,000	\$13.33	\$1,000,000.00	\$23.50	\$19.00	\$425,000.00
30%	70,000	\$14.29	\$1,000,000.00	\$23.50	\$19.00	\$330,000.00
35%	65,000	\$15.38	\$1,000,000.00	\$23.50	\$19.00	\$235,000.00
40%	60,000	\$16.67	\$1,000,000.00	\$23.50	\$19.00	\$140,000.00
45%	55,000	\$18.18	\$1,000,000.00	\$23.50	\$19.00	\$45,000.00

8. Has the APS incentive had an impact on the decision of system owners to invest in APS eligible technologies? Why or why not?

*The program has made it possible for several oil distributors to invest in injection systems at their bulk plant locations. These injection systems allow for the distributor to customize the percentage of biofuel they are delivering to each customer, i.e. B20, B30, B40, etc. Conversely, with the continued decrease in AEC values, the program becomes not financially viable as biodiesel is more expensive to purchase than heating oil. Please reference our answer to question #6 for more detail.*