## Cogeneration Plant Analysis of Revenue and Cost Avoidance Resulting from Icetec Contract

(assuming July 1st 85/15 Revenue split)

| FY2018-19 |              | Economic Events & Cost Avoidance |    |                        |    |              |    |            |    |            |    |                      |  |
|-----------|--------------|----------------------------------|----|------------------------|----|--------------|----|------------|----|------------|----|----------------------|--|
|           |              | Generation                       |    | Capacity               |    | Load         |    | Total      |    | Cost       |    | Total Revenue & Cost |  |
|           |              | Revenue <sup>(1)</sup>           |    | Revenue <sup>(2)</sup> |    | Response (3) |    | Revenue    |    | Avoidance  |    | Avoidance            |  |
| July      | \$           | 25,854.09                        | \$ | 26,350.00              | \$ | 19,289.46    | \$ | 71,493.55  | \$ | 76,172.62  | \$ | 147,666.17           |  |
| August    | \$           | 21,582.38                        | \$ | 26,350.00              | \$ | 1,375.03     | \$ | 49,307.41  | \$ | 74,444.16  | \$ | 123,751.57           |  |
| September | \$           | 52,232.52                        | \$ | 25,500.00              | \$ | -            | \$ | 77,732.52  | \$ | 77,650.17  | \$ | 155,382.69           |  |
| October   | \$           | 6,488.33                         | \$ | 26,350.00              | \$ | -            | \$ | 32,838.33  | \$ | 72,307.11  | \$ | 105,145.44           |  |
| November  | \$           | -                                | \$ | 25,500.00              | \$ | -            | \$ | 25,500.00  | \$ | 49,975.77  | \$ | 75,475.77            |  |
| December  | \$           | 4,647.67                         | \$ | 26,350.00              | \$ | -            | \$ | 30,997.67  | \$ | 39,680.56  | \$ | 70,678.23            |  |
| January   | \$           | 69,133.39                        | \$ | 26,350.00              | \$ | -            | \$ | 95,483.39  | \$ | 39,349.00  | \$ | 134,832.39           |  |
| February  | \$           | 14,857.04                        | \$ | 23,800.00              | \$ | -            | \$ | 38,657.04  | \$ | 69,436.06  | \$ | 108,093.10           |  |
| March     | \$           | 10,426.65                        | \$ | 26,350.00              | \$ | 2,330.79     | \$ | 39,107.44  | \$ | 82,998.80  | \$ | 122,106.24           |  |
| April     | \$           | 1,002.94                         | \$ | 25,500.00              | \$ | 7,033.98     | \$ | 33,536.92  | \$ | 111,006.16 | \$ | 144,543.08           |  |
| May       | \$           | 19,050.11                        | \$ | 26,350.00              | \$ | 37,912.46    | \$ | 83,312.57  | \$ | 104,895.47 | \$ | 188,208.04           |  |
| June      | \$           | 5,929.46                         | \$ | 19,380.00              | \$ | -            | \$ | 25,309.46  | \$ | 120,842.26 | \$ | 146,151.72           |  |
| TOTAL     | \$           | 231,204.58                       | \$ | 304,130.00             | \$ | 67,941.72    | \$ | 603,276.30 | \$ | 918,758.14 | \$ | 1,522,034.44         |  |
|           |              |                                  |    |                        |    |              |    |            |    |            |    |                      |  |
|           | Icetec Share |                                  |    |                        |    |              | \$ | 90,491.45  | \$ | 137,813.72 | \$ | 228,305.17           |  |
|           |              |                                  |    |                        |    |              |    |            |    |            |    |                      |  |
|           | IUP Share    |                                  |    |                        |    |              |    | 512,784.86 | \$ | 780,944.42 | \$ | 1,293,729.27         |  |

PJM's Load Response Programs are designed to provide a monetary incentive to customers who elect to reduce electrical consumption when Locational Marginal Prices (LMPs) exceed a defined threshold.

- (1) Generation Revenue: IUP receives incentive revenue by generating electricity for sale to PJM thus increasing the energy available on the PJM power grid. (Labeled as exported energy, ahead of the circuit meter.)
- (2) The Capacity Program permits registered PJM members to participate in an annual auction process that establishes future Reliability Pricing Models (RPM Auction).

Financial compensation is garnered for committing a pre-determined amount of electricity into PJM's transmission system when market conditions dictate the need for additional electrical capacity.

(3) Load Response: Additional monies are realized for electricity generated on site and consumed through IUP's electrical system. This energy production reduces the demand load on PJM's power grid. (Labeled as local energy, behind the circuit meter.)