Q. **Project C-66, Install Automated Meter Reading**

Provide details regarding the input factors and calculations for the CPW values.

A. The following summarizes the input factors and calculations that were used to determine the CPW values. Two alternatives were explored:

- Alternative 1: Maintain the existing Radix system
- Alternative 2: Deploy Landis + Gyr's TS1 AMR System

Inputs/Assumptions:

Alternative 1

The following is a list of inputs or assumptions that were considered for Alternative 1:

- 7.0% Discount Rate;
- Capital is spent at the end of a project year;
- Meter Reader Salary: $87,289
- Personal Protective Equipment (PPE) purchased every 2 years at $1,000/year;
- Handheld unit replacement every six years at $2,800/year.

Alternative 2

The following is a list of inputs or assumptions that were considered for Alternative 2:

- 7.0% Discount Rate;
- Capital is spent at the end of a project year;
- Total In-service Project Cost: $697,000

- In-service year: 2015
- Yearly AMR Service Agreement: $991.50/year

Calculations:

The following summarizes the calculations used to establish the CPW values for both alternatives.

a. Total Costs Calculation: O&M Costs + Other Costs (if applicable)

The following is a sample calculation for Alternative 1 in the year 2019:

$104,199 (Meter Reader Salary and PPE purchase plus escalation)
+ $2,800 (Replacement of Handheld unit)
$106,999

b. CPW Calculation

The following is a sample calculation for Alternative 1 in the year 2028:

Net = Total Costs + Benefits = $132,086 – $0 = **$132,086**

$CPW_X = (Net \div (1+ Discount\ Rate)^{(n+1)}) + CPW_{X-1}$

(Where n is the number of years and x is the year in question)

$CPW_{2028} = (Net \div (1+ Discount\ Rate)^{(16)}) + CPW_{2027}$

$CPW_{2028} = (\$132,086 \div (1+ 0.07)^{(16)}) + \$786,213$

$CPW_{2028} =$ **$830,956**