# How is the security on BC Hydro System Reinforcement work released after my plant is in operation?

**BC Hydro**
Power smart

The security paid by the customer on System Reinforcement will be returned to the customer on an annual basis in relation to the revenue off-set amount and the actual revenue received by BC Hydro from the customer's plant until such time the security amount is fully returned. Annual security releases are made in accordance with the following formula:

$$S_R = \frac{So}{8} \; x \; \frac{R_A}{R_E}$$

$S_R$ = The amount of security released in any given year following the commencement of normal operation of the Customer's Plant.

$S_0$ = The amount of security provided after re-evaluation.

$R_A$ = The actual revenue received during the year in question from the Customer and other Customers using the same System Reinforcement, for loads which are incremental to those loads projected at the time the security was taken.

$R_E$ = The minimum annual revenue which is required to make the BC Hydro offset equal to the Actual Cost, to be calculated as follows:

$$R_E = 0.135 \, (I_A - B - D) + E$$

Where $I_A$ is equal to the BC Hydro offset after adjustments as determined pursuant to subclause 5(d)(i) and *B,D*, and *E* have the meanings given in subclause 5(c)(ii).

*B* = other benefits to the BC Hydro system, as determined by BC Hydro

*D* = one-half the annual depreciation associated with the estimated total costs of System Reinforcement

*E* = the estimated incremental operation and maintenance expense of supplying the incremental load during the first year of normal operations

<u>Note</u>: If the total System Reinforcement cost is less than BC Hydro offset, the amount of the total System Reinforcement is used for $I_A$

Here's an example of how this formula is used. "My plant has now been in normal operation for a year. The maximum revenue off-set as determined by BC Hydro during the interconnection process was $48 Million, but the total System Reinforcement cost and the amount of security I had provided upfront was $28.5 Million (additional security was not required post normal operation), and my first year's energy billing (BC Hydro revenue) is $6.5 Million. What will my first year's security release be?" (Assume: $B = 0$; $D = 427,500$; E =220,000)

Based on the information:
$S_0$ = 28,500,000
$R_A$ = 6,500,000
$R_E$ = [0.135*(28,500,000-0-427500)+220,000] = 4,009,787.50

$S_R$ = (28,500,000/8) x (6,500,000/4,009,787.50) = 5,774,932

**The amount of security release for the year will be $5,774,932.**

Reference *Tariff Supplement No. 6 – Section 5, (d) ii* for more information.