%runfile /Users/juanramonjimenezmogollon/Downloads/Improve\_Hornsrev1\_Layout\_JRJ\_10\_03\_2025.py --wdir

Enter Site to be used 1-IEA37, 2-Hornsrev1, 3-UniforSite: 1

Enter Iteration Lenght in meters: 7

Enter Number of Iterations on each Generation: 400

Enter Number of Genetic Generations: 10

Enter border aditional distance from actual laylout in m: 40

Original AEP: 715.702891 GWh

Best solution on reference layout randomized Generation 0:

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aep\_best\_sol on reference layout randomized Generation 0: 715.7504250922531

Best solution on Genetic Generation 1:

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aep\_best\_sol on Genetic Generation 1: 715.7959446502173

Best solution on Genetic Generation 2:

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aep\_best\_sol on Genetic Generation 2: 715.8743515351621

Best solution on Genetic Generation 3:

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aep\_best\_sol on Genetic Generation 3: 715.9533331994882

Best solution on Genetic Generation 4:

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aep\_best\_sol on Genetic Generation 4: 716.0925679968335

Best solution on Genetic Generation 5:

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aep\_best\_sol on Genetic Generation 5: 716.1929720712275

Best solution on Genetic Generation 6:

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aep\_best\_sol on Genetic Generation 6: 716.2614630620978

Best solution on Genetic Generation 7:

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aep\_best\_sol on Genetic Generation 7: 716.3030092216412

Best solution on Genetic Generation 8:

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aep\_best\_sol on Genetic Generation 8: 716.38820206178

Best solution on Genetic Generation 9:

([423968.1222152772, 424027.99915262294, 424103.5872971098, 424155.78262715746, 424234.526202678, 424299.8529201723, 424372.970113133, 424426.9583044879, 424521.108875464, 424597.1658165198, 424676.7547995535, 424753.5324461133, 424808.30519839015, 424870.0922723206, 424937.09966335155, 425018.76730367664, 425088.8632151128, 425179.4075275197, 425236.0615592583, 425285.494741021, 425355.44814156654, 425430.5542026957, 425495.21563939506, 425561.50998980127, 425660.46421315346, 425733.14381174766, 425800.20647375967, 425857.41060778993, 425928.99664740916, 425987.7526221364, 426062.44176602195, 426133.72179570416, 426208.7093823969, 426278.7828797858, 426346.9073798468, 426421.67672644375, 426478.3778529009, 426556.8301382608, 426621.51682698785, 426683.1358289999, 426786.3863833631, 426836.60318292305, 426906.8608407044, 426971.1198747968, 427049.68294194713, 427115.5703589628, 427197.93377253896, 427241.61217260215, 427326.27732916805, 427404.0518756084, 427482.6515144849, 427550.34190085303, 427613.4248930924, 427666.48282563395, 427740.64968330157, 427827.0002219235, 427915.3791634793, 427965.7672592946, 428033.3390932271, 428087.2774885732, 428159.73250088334, 428230.71003736014, 428297.02643997857, 428373.50130415667, 428463.87540589634, 428533.36085072946, 428584.73233577627, 428670.4464271828, 428739.3625979178, 428798.4304108677, 428868.455483947, 428944.4016250143, 429018.26167350117, 429087.8893247548, 429170.3003998457, 429237.3797671266, 429300.56385071686, 429359.30096232815, 429438.28932577476, 429498.37174306257], [6151446.211061361, 6150889.89373538, 6150326.08231361, 6149789.9758575475, 6149221.945824248, 6148661.49105154, 6148117.6087758625, 6147537.71126423, 6151455.978515319, 6150889.783983667, 6150324.147583905, 6149785.655500492, 6149220.9975906825, 6148675.138242863, 6148112.606056113, 6147534.719369055, 6151459.516802051, 6150889.678719119, 6150339.478778347, 6149782.241629976, 6149225.115061653, 6148675.033057953, 6148108.23604903, 6147545.14959592, 6151459.176839586, 6150896.516935285, 6150338.642139037, 6149784.044641772, 6149221.199835845, 6148668.233418672, 6148117.621367986, 6147536.004431498, 6151466.476810522, 6150902.617643576, 6150352.072591665, 6149785.262446237, 6149212.009771442, 6148677.298186274, 6148116.919284035, 6147536.952992835, 6151453.202371307, 6150898.448975337, 6150345.816317379, 6149785.894004147, 6149221.888711497, 6148676.213597599, 6148105.816665725, 6147541.684391075, 6151448.542502257, 6150888.130971165, 6150335.566631181, 6149783.404877691, 6149232.278127617, 6148677.833179381, 6148109.863529402, 6147559.954780742, 6151457.743386386, 6150892.980678109, 6150335.594791036, 6149782.258875794, 6149223.779039919, 6148663.55175364, 6148113.238240205, 6147553.106853086, 6151456.0372139085, 6150888.995756668, 6150335.537194518, 6149783.961469152, 6149227.09504492, 6148662.252837111, 6148096.584276638, 6147536.738935922, 6151471.51771, 6150881.995448702, 6150345.3402534, 6149786.987453804, 6149239.100954915, 6148665.018284953, 6148090.766422411, 6147535.549769403])

aep\_best\_sol on Genetic Generation 9: 716.4760841949885

Best solution on Genetic Generation 10:

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aep\_best\_sol on Genetic Generation 10: 716.5573440208865

finalsolution

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aep\_max: 716.5573440208865









