

ULWAZI NGEPROJEKTHI

Isihloko: INgxelo ecetywayo yoHlobo lweMpembelelo yokusiNgqongileyo kwiSikhululo saMandla eNyukliya sakwaEskom kunye neZixhobo ezihambelana naso (i-Nuclear-1)

ULawulo lokusiNgqongileyo: ISebe leMicimbi yokuSingqongileyo (i-DEA)

Inombolo yokubhekiselela ye-DEA: 12/12/20/944

Umfaki-sicelo: I-Eskom Holdings Limited

Abacebisi bokusiNgqongileyo: U-Arcus GIBB (Pty) Ltd

Umhla: Febhuwari 2010

ISISHWANKATHELO SEQUMRHU ELILAWULAYO

INTSHAYELELO

U-Eskom Holdings Limited (u-Eskom) uceba ukwakha, ukusebenzisa nokuyekisa ukusebenza isikhululo esiqhelekileyo samandla enyukliye eMzantsi Afrika, ukuze akwazi ukumelana ngokupheleleyo neemfuno ezipheleleyo zombane. Ulungiselelo logesi luceba ulwakhiwo lwendlela yokubekiswa komthamo owongezelelweyo, ehambelana nenkqubo yokuqhubela phambili ukwaneliswa kwamandla ombane, nokuphuhlisa kwezinye iindlela (umz. ezenziwe ngokutsha) zokubekisa umbane. UMzantsi Afrika kungokunje ujongene neemfuno ezandayo zombane ezigqitha kwi-4%. Ngokoqikelelo lukaEskom, kukho imfuneko entsha yamandla ombane angaphezulu kwama-40 000 Megawatts (MW), kwisithuba seminyaka engama-20 ezayo. Injongo kaEskom kukwenza uphando malunga nokuba nokwenzeka kokunyuswa kokubekiswa kwamandla enyukliye ukuya kutsho kuma-20 000 MW.

limfuneko zowiso-mthetho zezixhobo zenyukliye eMzantsi Afrika zininzi ngokugqithisileyo. Ngokubhekiselele kwisikhululo samandla enyukliye, kudingeka izigunyaziso ezibini ezivela kubalawuli abasemagunyeni abangaba, iSebe leMicimbi yokusiNgqongileyo (i-DEA¹), kunye noMlawuli weSizwe weNyukliye (i-NNR). Ezi zigunyaziso ziyadingeka phambi kokuba kuqaliswe ngemisebenzi yokwakha.

Izigunyaziso zokusingqongileyo ngokubhekiselele kuMthetho weSizwe woLawulo lokusiNgqongileyo (i-NEMA, uMthetho onguNombolo. 107 ka-1998), kunye neZigunyaziso ze-EIA Regulations (2006) ziyafuneka phambi kokuba isikhululo esicetywayo samandla enyukliye sakhiwe, njengoko ibandakanya le 'misebenzi idwelisiweyo' (o.k.u. imisebenzi enokuthi ibe nempembelelo enokuthi yonakalise okusingqongileyo), eyona iphambili:

- *(1a) Kukusekwa kwezakhiwo nokusetyenziswa kwezixhobo, kubandakanya izakhiwo ezihambelana naso okanye izixhobo, ukuze kuveliswe umbane apho ukuveliswa kombane kungaphezulu kwama-20 Megawatts, ze isakhiwo sibe ngaphezulu kumgama oyihektare enye;*
- *(1b) Kunye nokwakhiwa kwezakhiwo okanye ukusetyenziswa kwezixhobo, kuquka izakhiwo ezibandakanyekayo okanye ukusetyenziswa kwezixhobo zenyukliye, kuquka ukuveliswa, ukukhuliswa, ukusetyenzwa, nokusetyenzwa ngokutsha kokugcinwa okanye ukulahlwa kwamafutha enyukliye, iimveliso zokuqhekeka kwee-athom kunye nenkunkuma.*

Abakwa-Arcus GIBB (Pty) Ltd (Arcus GIBB) uthe watyunjwa nguEskom, njengabaSebenzi boHlolo lokusiNgqongileyo (ii-EAP), ukuba baqhuba inkqubo yoHlolo lweMpembelelo yokusiNgqongileyo (i-EIA), ze baseke iSicwangciso soLawulo lokusiNgqongileyo (i-EMP), yesikhululo esicetywayo samandla enyukliye (esiza kubizwa ngokuba yi-Nuclear-1 emva koku), kunye nezakhiwo ezihambelana naso. Iqela leengcali lithe lancedisa kwi-EIA, laze laqulunqa iingxelo eziyimfuneko zobuchwephesha beengcali.

INkqubo ye-EIA ye-Nuclear-1 iqulathe izigaba ezibini eziphambili, isigaba sokuVavanya nesokuHlola. Kufakwe isicelo kwi-DEA ngoMeyi ka-2007, saze saguqulwa ngoJulayi ka-2008, sesikhululo esinye samandla enyukliye afikelela kuma-4 000 MW. Isigaba soVavanyo lwe-EIA sesiqukunjelwe. Abalawuli abasebenzayo, i-DEA, isebenzisana noogunyaziwe abachaphazelekayo bezokusiNgqonileyo kwiPhondo (iSebe leMicimbi yokusiNgqongileyo noCwangciso loPhuhliso [i-DEA&DP] zeleNtshona Koloni, kunye neSebe loPhuhliso lwezoQoqosho nemiCimbi yokusiNgqongileyo [i-DEDEA] yeMpuma Koloni) zaphumeza iNgxelo yoVavanyo ngoNovemba ka-2008.

¹ Ebelisakwaziwa njengeSebe leMicimbi yokusiNgqongileyo noKhenketho

Oku kuphumeza kwabandakanya isiphakamiso sokuba ezimbini kwezintlanu zeesayithi ezichaseneyo zangaphambili zihlolwe ngethuba lesigaba soVavanyo, eziyiBrazil neSchulpfontein eMntla-Koloni, ze zikhutshwe ekubeni ziphinde zibe nokuqwalaselwa kwi-EIA. Ukukhutshwa kwazo kwakusekelezwe ekubeni iisayithi ezichaseneyo azinakho ukuba ziisayithi ezichasene ne-Nuclear-1, ngokubhekiselele kwimfuno elinganiselweyo yasekhaya, kunye nokungabikho kweendlela esele zikho zokuhambisa umbane ezihambelana nezi sayithi. I-DEA yaphumeza iSicwangciso sokuGqibela seSifundo (i-PoS) se-EIA ngoJanuwari ka-2010.

Phakathi ku-2009, emva kokupapashwa kotshintsho lwesicwangciso kubaLawuli be-EIA ukuba uluntu luhlomle, uEskom wazisa ukuba uceba ukutshintsha isecelo sakhe ukuze sibandakanye izikhululo zamandla ombane ezingaphezulu kwesinye, ukuba utshintsho luthwaziswa ngokomthetho. Emva koqwalaselo olululo, uEskom wagqiba ekubeni angaqhubeki nesicelo sezikhululo ezingaphezulu kwesinye zombane kule-EIA. Kanti, ngokuhambelana nenjongo kaEskom yokwenza uphando malunga nophuhliso olunokuthi lube kho lokunyusa ukuveliswa kwamandla enyukliye ukuya kutsho kuma-20 000 MW, kungafakwa isicelo sesikhululo sesibini samandla enyukliye, nje emva kokunikezelwa kweNgxelo yokuGqibela yeMpembelelo yokusiNgqongileyo (i-EIR) ye-Nuclear-1.

Olu xwebhu sisiCwangciso se-EIR yeNuclear-1. Lushicilela inkqubo ye-EIA ethe yaqhutywa ukuvavanya iimpembelelo ezinokuthi zibekho zokusingqongileyo zesikhululo samandla enyukliye, kuso nasiphi kwezithathu zeesayithi ezichasene naso ezizezi, i-Duynefontein neBantamsklip eNtshona Koloni neThyspunt eMpuma Koloni. I-EIR esacetywayo yenza izindululo ngokubhekiselele ekugunyazisweni nasekusekweni okukhethwayo kweesayithi ze-Nuclear-1, okusekelezwe kwiziphumo ze-EIA.

I-NNR inikezwe igunya nguMthetho weSizwe woLawulo lweNyukliya (i-NNRA, uMthetho onguNombolo. 47 ka-1999) ukukhusela abantu, izakiwo neempahla, kunye nokusingqongileyo ekonakalisweni yinyukliye ngokuthi iseke imigangatho yokhuseleko kunye nemisebenzi yolawulo. Ngokuhambelana neCandelo 21 le-NNRA, u-Eskom kulindeleke ukuba afake isicelo esisesikweni kwi-NNR sephepha-mvume lokufakelwa kwenyukliye ukwenzela iisayithi, ulwaxhiwo, ukusetyenziswa, ukususa isidyobho sento enobungozi nokuyekisa ukusebenza kwesikhululo esicetywayo samandla enyukliye. I-NNRA yenza amalungiselelo eRhodi ye-NNR ukuba ibe nokuxoxwa luluntu. ngokuphathelele nemiba yezempilo, ukhuselo nokusingqongileyo ngokubhekiselele kwisicelo esisodwa.

NgokoMgaqo-Siseko weRiphabhliki yeloMzantsi Afrika (uMthetho onguNombolo. 108 ka-1996), kunye ne-NEMA, i-DEA inoxanduva lokuvavanya iimpembelelo zesikhululo samandla enyukliye kokusingqongileyo. Ekuqondeni iimfanelo ezimbolo-mbini nezohlukeneyo ngokuphathelele novavanyo lobungozi bokukhutshwa kwemitha, i-NNR neDEA zisayine isivumelwano sentsebenziswano. I-DEA, umlawuli ophambili kwimicimbi yezokusingqongileyo, ne-NNR ziye zavumelana ukuba zisebenzisane ekuhloleni imiba ephathelene nenyukliye. Ngokubhekiselele kule EIA, izifundo zubuchwepheshe eziphathelele nemiba yeradiyoloji ziye zabandakanyelwa ulwazi, njengoko i-DEA ingasokuze iziqwalasele iimpembelelo zeradiyoloji ekuthabatheni kwayo izigqibo.

INKCAZELO YEPROJEKTHI

Ubuchule Pressurised Water Reactor (i-PWR) technology, obusebenzisa amanzi njengesiphozisi which uses water as a coolant and moderator, buthe bakhethwa ngu-Eskom ebukhethela i-Nuclear-1. Ii-PWR zikhulisa ukuba zizona ziphenduli zisetyenziswayo kwihlabathi jikelele. U-Eskom uqhelene nobu buchwepheshe buvela kwezempilo nokhuselo, kunye nemibono yentsebenziswano, emva kokubusebenzisa iminyaka engama-25 kwiSikhululo saMandla eNyukliya saseKoeberg. Isikhululo samandla enyukliya esikuyilo olukuMgangatho wesi-III siyakhethwa nguEskom ngenxa yobulula

bokusetyenziswa kunye noburhabaxa boyilo, ukufumaneka, nokuba nokwenzeka okuncitshisiweyo kweengozi zokunyibilikiswa reduced possibility of core melt accidents, eyona mpembelelo incinane kokusingqongileyo, okona kusetyenziswa kuninzi kwamafutha kunye nokona kukhutshwa kuncinane kwenkunkuma.

lingcaciso ezipheleleyo zesayithi ecetywayo yenyukliye azikabikho, njengoko kungekabikho mnikezeli ukhethiweyo. Indlela esetyenzisiweyo kule nkqubo ye-EIA ibe kukubalula iimfuneko ezigubungelayo zezokusingqongileyo nezinye ezibandakanyekayo, ekufuneka uyilo nokwakhiwa kwesikhululo samandla ombane kwisayithi sizithobele. Kuqulunqwe indlela egubungelayo ukuqinisekisa ukuba zimele obona bunjani buthile bakudala obungqamene neminye imizimveliso eyohlukeneyo kubuchwepheshe be-PWR.

Indawo ethe yahlolwa kule EIA ilungiselela ukwanda kwexesha elizayo kwesikhululo samandla ombane, ukuvumela umthalo ophelileyo we-10 000 MW, ukuba oku kuthe kwaba nokwenzeka ngokokusingqongileyo nangongobuchwepheshe. Kuqikelelwa ukuba ummandla odingekayo uwonke ukuze kwakhiwe i-Nuclear-1 (4 000 MW) ziihektare ezingama-31. Ukongeza kokona kusekwa kwesikhululo samandla enyukliya, kuza kuba kho amacandelo amabini ommandla wokuthinta, ngeenjongo zokucwangcisa iimeko zongxamiseko, kwindawo enezakhiwo yesikhululo samandla ombane. Iindawo zokuthinta ezamkelwe kwihlabathi jikelele nezingqamene nohlobo lwe-PWR lobuchwepheshe zisaqwalaselwa ukulungiselela i-Nuclear-1. Kukho ulinganiselo kwindawo eziimitha ezingama-800 kuphuhliso lomhlaba oluya kuthi lunyanzeliswe. Le ndawo icetywayo ingama-800 eemitha iya kuthi iwele ngokupheleleyo kumhlaba kaEskom. I-NNR iya kuthi ithabathe isigqibo sokugqibela ngokuphathelene nobukhulu bendawo yokuthinta, ngokwe-NNRA.

Uludwe lwezakhiwo kwisikhululo esicetywayo samandla ombane luya kubandakanya, *phakathi kwezinye*, iziphenduli zenyukliya kunye nezancedisi zazo ezifana: namaholo eenjini zomsinga, izixhobo zokujongana namafutha asetyenzisiweyo kunye nokugcinwa kwamafutha enyukliya, izixhobo zokujongana nenkunkuma, iindawo zokungenisa nokukhupha eziyimfuneko ukugcina/ukukhupha amanzi asetyenzisiweyo ukuze apholise le nkqubo, umzimveliso wokususa ityuwa, imijelo yokugqithisela nokuhambisa, iindlela, iyadi yamandla amakhulu ombane, kunye nasiphi na esinye isakhiwo senkonzo encedisayo. UMzimveliso weNjini yomsinga weRhasi oVulelekileyo (i-OCGT), uya kuthi usetyenziselwe ukuveliswa okungxamisekileyo kombane.

Kwimeko apho iprojekthi ecetywayo ithe yagunyaziswa, kucingeleka ukuba ulwakhiwo luya kuqalisa ngo-2011, ngokwakhiwa kweyunithi yokuqala ngo-2018.

INKQUBO YE-EIA, INTATHO-NXAXHEBA YOLUNTU NOVAVANYO LWEMPEMBELELO

Inkqubo ye-EIA ibandakanya inkqubo yeNtatho-nxaxheba yoLuntu (i-PPP) kunye nezifundo zobuchwepheshe eziqhutyweyo, kwanemiba echongiweyo yaze yahlolwa njengesiphumo.

Inkqubo ecetywayo ithe yaziswa ngoMeyi noJuni ka-2007, ze kwaqaliswa ngobhaliso lwabo baNomdla nabaChaphazelekayo (ii-I&AP), ukuqinisekisa ukubandakanyeka kwasekuqaleni kwababandakanyekayo kwinkqubo ye-EIA. Ubhaliso lwee-I&AP luqhebekile kuyo yonke i-EIA. Ii-I&AP ezibhalisiweyo ziye zacetyiswa ukuba ngobukho beNgxelo eCetywayo yoVavanyo (i-DSR), zaze zanikezwa ithuba lokuba zihlole ngokutsha ze zinike olwazo uluvo malunga nale Ngxelo. IiNtsuku ezininzi zokwazisa uLuntu ngokuBanzi, iiNtlanganiso zamaQela zokuGqalisela kuNdoqo (ii-KFGM), kunye namaQweba abaChaphazelekayo abaPhambili (ii-KSW) zabanjwa ukwenzela ukuba ii-I&AP zikwazi ukuxoxa ngeziphumo ze-DSR neqela le-EIA. Izimvo ze-I&AP zaye zadityaniswa kwiNgxelo yeMiba neMpendulo (i-IRR) kunye neNgxelo yokuGqibela yoVavanyo.

Iimpembelelo ezinokuthi zibe kho neziphathelene ne-Nuclear-1, zither zachongwa ngokuphambili kwiSigaba soVavanyo ngokuthi kuqhutywe inkqubo yonxibelelwano echazwe apha ngasentla. Ezi pembelelo zithatyathwe kwimiba echongwe ngokubhekiselele kuzo zonke izigaba zophuhliso lwe-Nuclear-1. Ukongeza, isiGaba soVavanyo sichaze iprojekthi ezohlukeneyo ezichasene nale

icetywayo. Ezi zither zadluliselwa phambili ukuze ziqwalaselwe kwiSigaba se-EIA.

Imeko esisiseko kwisayithi nganye echaseneyo ithe yaphandwa ngamachule ezobuchwepheshe yaze yachazwa ngokubhekiselele ngokwemiba yezinto ezibambekayo, yebhayoloji neyasekuhleni. Ezinye iimpembelelo ezongezelelweyo zithe zachongwa ngophando zochwepheshe abohlukeneyo (uphando olwenziwe kwikhompyutha naolwenziwe ebantwini ngqo) nangenkqubo eqhubekayo yoonxibelelwano nee-I&AP. Oochwepheshe bathe bahlola ukubaluleka kweempembelelo ezichongiweyo nezinokuthi zibe kho, baze benza isindululo esifanelekileyo sokuthomalalisa apho beziyimfuneko khona. Ngethuba leSigaba se-EIA, uluntu nalo luye lwanikezela ngolwazi olubalulekileyo nolungqamene nalo, kunye nolunye ulwazi kwi-EIA, kunye nesiqinisekiso esinisekisiqwyo sokuba le miba ithe yaqwalaselwa kuphando lokusingqongileyo. Iziphumo zophando loochwepheshe ziye zadityaniswa zaze zahlolwa kule EIR icetywayo.

Elinye ilungu eliphambili leSigaba se-EIA luhlolo ngokutsha lweziphumo ze-EIA, ezithe zanikezelwa kwi-EIR ecetywayo, kunye neengxelo zochwepheshe ezihamba kunye nalo. Zonke ii-I&AP ezibhalisiweyo zither zaziswa ngeeta malunga nobukho beNgxelo nobeeNtlanganiso zoLuntu ezicetywayo (ii-PM). Ii-KSW zibanjwa eNtshona Koloni naseMpuma Koloni. Ubukho be-EIR ecetywayo kunye namalungiselelo eeNtlanganiso zoLuntu zithe zathengiswa kwiindlela zosazo zelizwe jikelele, ezesithili nezasekhaya.

IIPROJEKTHI EZIZEZINYE KUNYE NOHLOLO LWAZO

Ukuqwalaselwa kweprojekthi ezizezinye yiyona mfuneko iphambili ye-EIA, njengoko zinikezela ngesiseko sokukhethwa kwabalawuli belo candela nee-I&AP. Iiprojekthi ezizezinye ziyaqwalselwa njengendlela yokufikelela kwimfuno enye kunye nenjongo njengeprojekthi ebicetywe kwakuqala, ngendlela ethi inciphise iimpembelelo ezingentle, ze yandise iimpembelelo ezilungileyo. Iiprojekthi ezizezinye eziqwalaselwayo kufuneka zibe zezizizo yaye zibe nokwenzeka. Ezi projekthi zizezinye eziqwalaselwa ngethuba le-EIA ziquka ezi zilandelayo:

- Indawo yesikhululo samandla ombane;
- Iindidi zokuveliswa kombane;
- Iindidi zemizimveliso yenyukliya;
- Isiseko somzimveliso wenyukliya;
- Ukuhanjiswa kwamanzi afreshi nokusetyenziswa kwamanzi atswalwe emhlabeni;
- Ukulawulwa kwamanzi anetyuwa;
- Ukungeniswa kwamanzi aselwandle;
- Ukukhutshwa kwamanzi kunye nokungcola kweekhemikhali;
- Ukulawulwa kwezinto ezonakeleyo;
- Ukufikelela kwiisayithi;
- Ukuhanjiswa kwenkunkuma; kunye
- Nezinye iindawo ezingenaluphuhliso (o.k.u. 'Akuhanjwa').

Uhlolo lwezinye iiprojekthi lusekelezwe kwintlanganisela yeendidi zohlolo ezishicilelwe ziingcali, iziphumo zeqweba zohlanganyelo lweengcali ebelibanjwe ngoNovemba ka-2009, kunye nohlanganyelo lukaArcus GIBB nohlolo lweziphumo zophando.

Indawo yesikhululo samandla enyukliya

Iiprojekthi ezintathu ezizezinye ezithe zahlolwa kwi-EIA zezi:

- I-Duynfontein, ejongene ngqo ikwasemantla eSikhululo saMandla eNyukliya saseKoeberg kuNxweme lweNtshonayeKapa, malunga nama-35 eekhilomitha kumantla eKapa. Le sayithi iphantsi kwendawo esele ikho kaEskom, equka imimandla yolondolozo lwendalo.
- I-Bantamsklip, ekummandla woNxweme olukuMzantsi Kapa, kumbindi ophakathi kweDanger and Quoin Points. Le sayithi iyinxalanye yesakhiwo esipheleleyo saseBantamsklip, yaye isetyenziselwa ukuvunwa kweentyatyambo, ukuloba kunye nokulotywa okungekho mthethweni kweembaza.
- I-Thyspunt, ekummandla okunxweme olukumaZantsi eKapa, phakathi kwe-Oyster Bay neSt. Francis Bay. Isayithi ye-Nuclear-1 esacatywayo kungokunje ayinanto, kodwa kukho izindlu ezininzi ezikwiziza ezijongene nayo, ngaphandle kwee-EPZ zesikhululo esicetywayo samandla enyukliya.

limpembelo ezinokuthi zibe kho zokusingqongileyo kwiisayithi ezintathu ezichaseneyo zither zahlolwa ziingcali zobuchwepheshe², ze kwanikezelwa ngesi sishwankathelo seziphumo silapha ngezantsi

ISifundo samatye neeminerali kunye nohlolo lweengozi eziphathelene naso

Uhlolo lweempembelelo ezinokuthi zibe kho ngokuphathelene nobungozi besi sifundo asingqamenanga kuphela nobungozi obuphathelene neenyikima kule sayithi, koko nobuphathelene nomgangatho wamanzi kule ndawo. Ulwazi olukhoyo oluphathelene nale sayithi luveza ukuba kukho ubungozi obungephi obuphathelene namatye neeminerali, yaye akukho zinto zichasene nayo nayiphi na kwezi sayithi zintathu kwindawo ezingqongileyo.

Ubungozi obuphathelene neenyikima

Isiphakamiso esiphambili ngokuphathelene nobungozi obuphathelene neenyikima bubukho bomzimveliso ukuze kukwazeke ukuphunyezwa koyilo lwezehlo ezisisiseko. Uyilo lwesehlo ezisisiseko seso sehlo siza kusetyenziswa kuyilo olucacileyo lokubaluleka okusingisela kukhuselo, nokhuselo olusingisela ekubalulekeni kweenkqubo ze-Nuclear-1. Kumzimveliso oqhelekileyo isehlo esingqamene noyilo olusisiseko sithi siqwalaselwe ukuqinisekisa ukuba isikhululo samandla ombane singakhiwa kwisayithi eyodwa neqwalaselweyo. Isiseko esingaphaya koyilo kukuba isehlo sisetyeziswe ukuqinisekisa iziphumo ezihle kuyilo olunokuthi lwenzakalise imisebenzi ezisisiseko yokhuselo.

Ngokubhekiselele kumsebenzi oqunjelweyo ukuza kuthi ga ngoku, akukho zisayithi zichaseneyo zithe zalungiselelwa izinto ezingalungang ngokuphathelene neenyikima. Based on work completed to date none of the alternative sites are considered to have any seismic disqualifiers. Ulwazi oluthe vetshe luza kuthi luvezwe kwinkqubo yeKomiti ePhezulu yeeNgcebiso zobuNgozi obuphathelene neeNyikima (i-SSHAC). Le nkqubo iza kuthi iqunjelwe kuphela kwisithuba seminyaka emibini ukuya kwemithathu, yaye sisenokukhokhelela ekuhlolweni kobungozi obandayo okanye obunciphayo obuphathelene neenyikima kwezi sayithi.

Isiseko soyilo lwezikhululo ezisemgangathweni zamandla enyukliya silindeleke ukuba sisekelezwe kubungozi obuphathelene neenyikima siyi-0.3 g. Umlinganiselo ongaphaya kwalo mgangatho ungabangela uhlobo ngokutsha kunye noyilo lomzimveliso osemgangathweni, okhokhelela ekongezweni okunokuthi kube kho nokubalulekileyo ngokwezimali kwixabiso elipheleleyo lokwakha kunye nelokusebenza komzimveliso.

Iingozi eziphathelene neenyikima kwiisayithi ezichaseneyo ziyohluka kakhulu. Uphando oluqunjelweyo noluphathelene neenyikima ukuza kuthi ga ngoku luveza ukuba iziseko zoyilo zeesayithi ezohlukeneyo zihamba ngolu hlobo:

- I-Duynfontein - PGA (~0.3 g)
- I-Bantamsklip - PGA (~0.23 g)

² Ingxoxo kweli candela ilinganiselwe uphando lweengcaphephe ze-EIA. Uphando olungqamene nenkqubo yokunikezelwa kwelayisenisi ye-National Nuclear Regulator (i-Human Health Risk Assessment, lingxelo zoLawulo lweSayithi nokuPhendula kwimeko yoNgxamiseko) lubandakanyiwe njengesihlomelelo kwiNgxelo ecetywayo yeEMPembelelo yokusingqongileyo ukwenzela ulwazi kuphela.

- I-Thyspunt - PGA (~0.16 g)

Amaxabiso anikezelwe isayithi nganye kwezichaseneyo ngamaxabiso e-(PGA). I-Thyspunt ibonakalisa ubungozi obusezantsi ngokumandla ngokuphathelene nazo naziphi na zinto ezohlukeneyo ezithi zivele kwinkqubo ye-SSHAC, neyinkqubo yokuqukunjelwa kweesayithi ezintathu ezichaseneyo. Kuxhomekeka kwiziphumo zale nkqubo, ukutyeshela okunokuthi kube kho ekuhambeni kwethuba kuyilo olusemgangathweni lwesikhululo samandla enyukliya, nolukhangeleka lusenokubakho kwiisayithi zaseBantamsklip naseDuynefontein, kuya kuthi kukhokelele kwixabiso elibalulekileyo elinokuthi libe kho, kunye nokulibaziseka kwexesha kwi-Nuclear-1, ukuba ithe yavunywa.

Ukufaneleka kobuchule obuphathelene nomhlaba

Iimpembelelo ezinokuthi zibe kho ngokuphathelene nokuzinza kwethambeka okubangela ubungozi bezokhuselo ngaphandle kweendlela ezithintelayo, zinempembelelo nesiphumo esingephi kuzo zonke iisayithi ezichaseneyo, njengoko ubuchule boyilo lozinzo lwethambeka buya kuthi busetyenziselwe ukujongana nale miba. Iimpembelelo ezinokuthi zibe kho neziphathelene nokombiwa okwenziwa kwisanti eninzi kuya kubaluleka ngokwemigangatho eyohlukeneyo kuzo zonke iisayithi ezichaseneyo, kuxhomekeka kwiindawo ezikhethiweyo ekugqibeleni.

Iimeko zokusetyenziswa koxinzelelo lwamanzi

Uhlolo lokusetyenziswa koxinzelelo lwamanzi luthi lwaphanda ngokufumaneka kweesayithi ngokuphathelene neemeko zoxinzelelo lwamanzi kunye neempawu zemisinga, imilambo kunye nezinye iindlela zokuhamba kwamanzi. Iimpembelelo ezinokuthi zibe kho ngokuphathelene nemeko yoxinzelelo lwamanzi oluphathelene nobungozi bezikhukhula obunokuthi bube kho kwiindawo ezisezantsi ezingqonge unxweme lwe-EIA and increased surface run-off volumes and peaks. Kanti, ezona mpawu ziphambili ezohlula iimpembelelo ezinokuthi zibe khokwiisayithi ezintathu ezichaseneyo ziphathelene ikakhulu nokuna kwemvula, ubukho bemigxobhozo ngokwamaxesha onyaka kunye neendlela ezingaphelelwayo zokuhambisa amanzi. Iimpembelelo ezithe ngqo ngokuphathelene noxinzelelo lwamanzi kuzo zontathu iisayithi azibalulekanga kakhulu.

Ukuhanjiswa akwamanzi afreshi

Akukho milambo okanye misinga ingaphelelwayo kuyo nayiphi isayithi kwezi zintathu zichaseneyo. Ukwakhiwa nokusetyenziswa kwe-Nuclear-1 kuya kuthi kungabi nampembelelo ithe ngqo kwiindlela zokuhanjiswa kwamanzi ngaphezu komhlaba. Ngaphezulu, njengokuba i-Nuclear-1 iza kuthi yakhiwe kwisayithi ezikunxweme apho amanzi avela phantsi komhlaba athi abe kufutshane nesiphelo sendlela, ukusetyenziswa kwamanzi avela phantsi komhlaba okunokuthi kuchapazeleke ngqo yimithombo eselunxwemeni. Naziphi na iimpembelelo kule mithombo ziya kuba zezasekhaya. Ukukhetshwa kwetyuwa kumanzi aselwandle kuchongwe njengeeyona ndlela ilungileyo ekuhanjiseni okungaqinisekiswa kwamanzi kuzo zontathu iisayithi ezichaseneyo. Ukukhetshwa kwetyuwa emanzini kuneyona mpembelelo incinane kokusingqongileyo yaye akunakuchatshazelwa lutshintsho lwemozulu.

Iimpembelelo zobume bomhlaba dunes -

Amanzi aphuma phantsi komhlaba "awazonakalisi" iisayithi zaseDuynefontein okanye eBantamsklip. Ngoko ke, akukho zimpembelelo zinokuthi zibe kho neziphathelene nonxibelelwano phakathi namanzi aphuma phantsi komhlaba kunye dune dynamics at these sites. Iindlela zokungena kunye neendlela zokuhambisa umbane zingakhiwa eDuynefontein naseBantamsklip, nezinokuthi zibe neempembelelo ezinokuthi zibe kho zokusetyenziswa ukusuka kweziphakathi ukuya kwezisezantsi. Iindlela zokungena kunye neendlela zokuhambisa umbane eDuynefontein zingakhiwa kwindawo elinyiweyo nenohlaza oluziphumelayo nenempembelelo ezimbalwa ezinokuthi zibe kho emsebenzini emva kokubiyuselwa kwimeko yesiqhelo. Kuzo zombini ezi meko, isanti ehambayo kwingingqi yesakhiwo kungafuneka ukuba izinziswe.

Unxibelelwano phakathi kwenkqubo zesanti kunye nemigxobhozo ixandile kwisayithi yaseThyspunt, kuba amanzi aphuma phantsi komhlaba esonakalisa iindawo ezininzi ezinesanti kwindawo enesanti

eOyster Bay ukubangela imigxobho. Kukho unxulumano phakathi kwesanti nemigxobhozo, amanzi aphuma phantsi komhlaba kunye namanzi angaphezulu komhlaba. Ngoko ke, nakuphi na ukuphazamiseka kwendawo enesanti eOyster Bay kungabangela iimpembelelo ezimandla kwimigxobhozo. Ngaphezulu, ngenxa yeendawo ezikuyo izakhiwo neendlela zokuhambisa, iindlela zothutho, amabhanti okuhambisa phakathi kwesikhululo senyukliya esisemazantsi kunye neyadi yeHV esemantla, iimpembelelo ezisenokuba kho kubume besanti eThyspunt zisenokuba ngaphezulu kunezinye iisayithi ezimbini ezichaseneyo. Ukwakhiwa okucetywa okokugqibela kwe-Nuclear-1 (kuquka neendlela kunye neentambo zombane), kunye nokusetyenziswa kwendlela echanekileyo yokwakha (umz. Ukusetyenziswa kweenqwelo-ntaka ukufakela iipali ezinkulu zombane kunye nokuzidibanisa, ukubuyiselwa kwimo yesiqhelo kweendawo ezonakalisiweyo, ukuncitshiswa kwenani leendlela ezakhiwayo njl njl. kuya kwenzelwa ukuqinisekisa ukuncitshiswa kweempembelelo ezinokuthi zibe kho kwiindunduma.

Iimpembelelo kumgangatho womoya

Ngokubhekiselele ekulinganisweni kwenkqubo yokuveliswa kombane kwi-Nuclear-1 kuzo zonke iisayithi ezichaseneyo, ubume bokukhutshwa komoya iya kufana kakhulu kuzo zonke iisayithi. Ezona mpembelelo zibalulekileyo nezinokuthi zibe kho kumgangatho womoya zingathi zivakale ngethuba lolwakhiwo, ngenxa yokuhanjiswa kothuli kwimisebenzi yolwakhiwo (ukucoca, ukugrumba, ukukrwela, iindlela, nj njl.) kunye nokukhutshwa komsa ezimotweni nakwizixhobo. Iimpembelelo zesigaba solwakhiwo ziyakubaluleka kakhulu ukuba akukho zindlela zakunciphisa zilinganiselweyo zithi zisetyenziswe, koko ekunciphiseni ukufakelwa kwetha ezindlela.

Iimpembelelo ezinokuthi zibe kho kwisigaba sokusebenzisa zizingcolisi-moya ezingasebenzisi mitha zicingelwa ukuba zimbaleka. Ngaphezulu, ngokubhekiselele kwiimpembelelo ezicingelwayo zokukhutshwa komsa ongenamitha nonemitha, iimpembelelo zokusebenzisa kuzo zonke iisayithi ezichaseneyo zingaba phantsi kwezikhokhelo ezisemthweni nezilinganiselweyo. Iimpembelelo ezinokuba kho ziyafana kuzo zontathu iisayithi ezichaseneyo yaye akukho sayithi ikhethwayo ngokuphathelene neempembelelo kumgangatho womoya.

Iimpembelelo kwizityalo

Kwezi sayithi zintathu, i-Bantamsklip iya kuba nezona mpembelelo zimbaleka kwizityalo, njengoko izityalo nandlalo kule sayithi ziyinto eqhelekileyo kummandla oselunxwemeni, kuxhomekeka ekubeni isikhululo samandla ombane sikwisiqingatha esiseMpuma se-EIA, kude nefynbos nelitye elineeminerali. Ngokuphathelene neesayithi i-Thyspunt neDuynefontein, i-Thyspunt ukuza kuthi ga ngoku inezona zityalo zohlukeneyo, kuquka nezo zikwimigxobhozo enobugcalagcala, ngokukodwa indawo yomigxobhozo eselLangefontein, empuma yesayithi. Ngoko ke, kwiisayithi ezintathu ezichaseneyo, i-Thyspunt iya kuba nezona mpembelelo zinokuthi zibe kho (o.k.u. yiyona, ilandelwe yi-Duynefontein (phakathi) ibe yiBantamsklip (eyona ikhethwayo). Iindlela zokunciphisa ezicetywa ziingcaphephe, ezifana nokukhangela nokusindisa ze kutshintshelwe kwenye indawo kwezityalo ezinqabileyo, ukubuyiselwa kwimo yesiqhelo kweendawo ezophazamisekileyo, ulawulo lwezityalo ezingezo zalapho ngokwendalo, ubuchule bokwakha, njl njl. ziyakhuthazwa ukunciphisa ukubaluleka kweempembelelo ezichongiweyo nezinokuthi zibe kho.

Iimpembelelo kwimigxobhozo

Ukwakhiwa kwesikhululo samandla enyukliya eDuynefontein akukhangeleki kunokubangela naziphi na iimpembelelo ezingatshiswayo nezibaluleke kakhulu kwimigxobhozo. Ukwakhiwa kwe-Nuclear-1 eBantamsklip akunakungqanyaniswa nazo naziphi na iimpembelelo kwiinkqubo zemigxobhozo. Xa zithetha zancitshiswa, iimpembelelo kwisayithi azinakubaluleka kakhulu.

E-Thyspunt, iimeko eziqwalaselwayo ngokubhekiselele kwiimpembelelo ezinokuthi zibe kho zixande kakhulu. Kucingeleka ukuba kukho unxulumano olukhulu phakathi kweenkqubo yeendunduma kunye nemigxobhozo. Ngoko ke, ngokwemigxobhozo, ukuza kuthi ga ngoku, ezona mpembelelo zimandla zinokuthi zibe kho zingenzeka eThyspunt, nezinokuthi zenze ukuba iBantamsklip naseDuynefontein zingabaluleki kakhulu (phakathi). Iindlela zokunciphisa ezikhuthazwayo ziingcaphephe ekuthinteleni imigxobhozo ngezakhiwo okanye ngokunciphisa iimpembelelo zazo ezinokuthi zibe kho (umz. Ukuqwalaselwa okongezelelweyo, ukushiya iindawo ezingqonge imigxobhozo, ukusetyenziswa kwamabhanti okuhambisa Isanti kuyo yonke isayithi njl njl. kufuneka kuphunyezwe ukuze kuncitshiswe iimpembelelo ezinokuthi zibe kho.

Iimpembelelo kwizilwanyana ezingahlali manzini

Uninzi lweempembelelo ezinokuthi zibe kho kwizilwanyana ziqhelekile kuzo zontathu iisayithi ezichaseneyo, nangona ubungozi bazo busenokwahluka ngokweesayithi. E-Duynefontein, umthamo womhlaba ongenabugcalagcala kwizilwanyana phakathi konxweme kunye no-R43 okhoyo ukuze kwakhiwe, wanele ukuvumela i-Nuclear-1. Ummandla wendawo eku-R43 inobugcalagcala kakhulu yaye kufuneka ingakhiwa konke konke.

E-Bantamsklip i-Nuclear-1 inganeempembelelo ezithe ngqo, ezingentle nezinokuthi zibe kho kwizilwanyana. Kanti, kusenokuba kho izilwanyanana ezivela kolunye uhlobo eBantamsklip, ukuba indawo engakhiwanga ichazwe njengeyolondolozo lwendalo, yaye ilwaulwa ngolo hlobo. E-Thyspunt, i-Nuclear-1 inganeempembelelo ezingentle ezinokuthi zibe kho kuba yeempembelelo ezithe ngqo kwizilwanyana kwezo ndawo, ukwakhiwa kwezona ndlela ziphambili zimbini zongena nezintsha, kunye nemfuno yokwakha indawo esantini. Iindlela zokunciphisa ezicetywe ziingcaphephe zokuthintela izilwanyana ezingahlali emanzini ngezakhiwo okanye ukunciphisa iimpembelelo zazo ezinothi zibe kho (umz. Imisebenzi yokukhangela nokusindisa phambi kokuqaliswa kokwakhiwa, ukufakelwa kwesixhobo sokulumkisa iintaka ngeentambo zombane, ukusetyenziswa kwezibane ezifanelekileyo zangaphandle, uyilo oluchanekileyo locingo, ukusetyenziswa kweendlela ezifanelekileyo zokwakha nokusebenzisa njl njl.) kufuneka zisetyenzisiwe ukunciphisa iimpembelelo ezinokuthi zibe kho.

Iimpembelelo kwizilwanyana ezingahla manzini

Iimpembelelo ezinokuba kho kwisikhulo esicetywayo samandla ombane se-Nuclear-1 kwizilwanyana ezingahlali manzini ziyafana kakhulu kuzo zontathu iisayithi, but kukho iindawo ezohluka ngazo ngokwesayithi nganye ezifumaneka apha. Akukho mabhabhathane ekulindeleke ukuba afumaneka kummandla we-Cape Flats Dune Fynbos ongqonge i-Duynefontein, asemngiphekweni yaye ngawalapho. Iindawo ezingenaluhlaza okanye ezingenaluhlaza ngokupheleleyo zale sayithi zichongwe njengezinobugcalagcala obubobona buncinane nezinobuncinane ngokulandelelana kwazo. Uhlobo olutsha lweembovane ezifumaneka eDuynefontein lubonwa njengoluqhelekileyo nolunokufumaneka ikakhulu nakwezinye iindawo zale sayithi.

I-Thyspunt inawona mabhabhathane ohlukeneyo ngandlela zonke ikwanexabiso lokuwalondolozwa kunezinye iisayithi ezichaseneyo. I-Thyspunt ichongwa njengenobugcalagcala kuneDuynefontein, yaye ingaphantsi nje kancinci kuneBantamsklip. Ezi sayithi xa zithelekiswa ngokobugcalagcala obukhulayo nokufaneleka, kuqala i-Duynefontein (enezona mpembelelo zizezantsi nokubaluleka okupheleleyo), kulandele i-Thyspunt, ze ekugqibeleni ibe yi-Bantamsklip (enezona mpembelelo zininzi ezinokuthi zibe kho). Ngokweempembelelo ezinokuthi zibe kho nezilungileyo zesikhululo samandla enyukliya, i-Duynefontein sele ixhamla kwizibonelelo phantsi kolawulo lukaEskom, nto leyo ithetha ukuba iya kuba neyona nkqubela incinane kwezolondolozo. I-Bantamsklip neThyspunt, kwelinye icala, zingaxhamla kakhulu ekuzuzeni iwonga elikhuselwe ngokusesikweni. Ngoko ke, Thus iprojekthi ecetywayo inganeempembelelo ezilungileyo kwizilwanyana kwiisayithi zeseBantamsklip okanye eyaseThyspunt.

Iimpembelelo kwisifundo nezaselwandle

Iimpembelelo zobume besifundo ezinokuthi sibe kho ngezaselwandle bunempembelelo ziyafana kuzo zonke iisayithi ezichaseneyo. Ngokunokwenzeka, ezona mpembelelo zibalulekileyo kukuhlutshwa kwemeko yezaselwandle ngokuthi kulahlwe izinto elunxwemeni, nangokukhutshwa kwamanzi okupholisa afudunyeziweyo. Uphazamiso luya kwayanyaniswa nokulahlwa kwenkunkuma evela xa kugrunjwa. Le mpembelelo inokuba kho iya kuba nefuthe lexesha elide kwizinto eziphila elwandle.

Ngokwaselwandle, akukho ikhethwa ngokucacileyo. Zonke iisayithi zinganemigangatho efanayo eempembelelo ezingentle, yaye iimpembelelo kuzo zonke iisayithi zinga ncitshiswa ngokwaneleyo ukuba uyilo olucetywayo luphunyezwa ngendlela olucwangciswa ngayo.

Iimpembelelo kwisifundo sazaselwandle

Nangona esona sakhiwo siphambili se-Nuclear-1 siya kwakhiwa ubuncinane iimitha ezili-10

ngaphezulu kwesiseko solwandle, isakhiwo esingqameneyo esifana nesokungenisa nokukhupha amanzi okupholisa, kunye nokukhutshwa okonokuthi kube kho kwenkunkuma evela xa kusombiwa elwandle, zingaba nempembelelo kwiimeko zaselwandle.

Iimpembelelo ezinokuba kho zezaselwandle eziphathelelene nolwakhiwo zilindeleke ukuba zifane kwisayithi nganye echaseneyo, zontathu ezi sayithi zikulungele ukwakhiwa kwe-Nuclear-1. Kanti, ukuba i-Bantamsklip ithe yakhethwa, oko kunganempembelelo kukhenketho (ingakumbi ekufakweni kwikheji yookrebe eDyer Island). Ikakhulu kukuhanjiswa kwe-thermal plume kuyaqhubeka eThyspunt, apho i-plume ibonwa njengento ebalulekileyo kwiindawo eziselunxwemeni. Okona kuhanjiswa kubalulekileyo kwe-thermal plume kuya kwenzeka eDuynefontein. Kanti, ukuhanjiswa kwe-plume kubonwa njengokwamkelekileyo kuzo zonke iisayithi ezichaseneyo.

Uhlolo lwempembelelo yezoqoqosho

Iimpembelelo ezilungileyo zezoqoqosho zizonke ziya kuba ninzi eBantamsklip naseDuynefontein, ze zibe mbalwa eThyspunt, njengoko iisayithi ezimbini zokuqala zibekwe kwiphondo elinoqoqosho olohlukeneyo noluncomekayo. I-Nuclear-1 ingakhokhelela ekususweni okungaphantsi kwemisebenzi yezoqoqosho ukuba ibekwe eDuynefontein, kunenye yezi sayithi zimbini. Izibonakaliso zezoqoqosho zivumela i-Duynefontein neBantamsklip. Kanti, uhlalutyo lokuhambelana namaxabiso lubonakalisa ukuba i-Thyspunt ingaphezulu kancinci kuneDuynefontein, yaye ingaphezulu kancinci nakuneBantamsklip. Umohluko phakathi kweesayithi ezichaseneyo mncinane kakhulu, yaye zonke iisayithi zinganeempembelelo ezilungileyo zezoqoqosho ummandla wasekhaya nakowephondo ezibekwe kulo.

Uhlolo lweempembelelo zezoqoqosho lunikezela ngomsebenzi omkhulu kuhlalutyo lokuhambelana namaxabiso. Oku kuvumela i-Thyspunt njengesayithi ekhethwayo, ilandelwe yi-Duynefontein neBantamsklip.

Iimpembelelo zasekuhlaleni

Ngokwasekuhlaleni, ezona mpembelelo zinokuba kho nezibalulekileyo nezinokuvela kwisikhululo sombane ziphathelelene kwiindawo yokuhlalisa abasebenzi bexeshana, ngokukodwa ngethuba lokwakha. Ukuba nokwenzeka kokungungelana kwabantu abafuna imisebenzi nako kukwayinyani. Abasebenzi abangxungxileyo, bedibene nabantu abangungeleneyo bengafumenanga misebenzi, banganeempembelelo ezininzi ngokwasekuhlaleni. Oku kuquka, phakathi kwezinye, ungquzulwano kunye noluntu lwasekuhlaleni, ukhuphiswano ngomsebenzi kunye nakuzibandkanya kwamadoda angatshatanga kunye nabasetyhini basekuhlaleni (ukwanda komngcipheko wezifo ezosulela ngesondo, uGawulayo nentsholongwane yakhe, kunye nokukhululelwa okungafunwayo nokukhokhelela kubantwana abangenayise). Ukwanda kubundlobongela nakwezinye izinto ezingekho mthethweni ezinokuba kho nazo azinakushiya ngaphandle.

Eyona mpembelelo ilungileyo inokuba kho ngokwasekuhlaleni kukunikezelwa kombane kunye nonxulumano lwayo noqoqosho ngokubanzi ngokwesizwe nangokwengingqi ngokomsebenzi wexeshana, amathuba oshishino lwasekhaya (ii-SMME), kunye nophuhliso lwezakhono olunokuthi lube kho ngethuba lolwakhiwo. Ukubaluleka nokulandelelana ziphakamile ngokubhekiselele kumazinga aphakamileyo endlala nentswela-ngqesho nezibonakalisa ubume bezentlalo kuzo zontathu ezi sayithi. Umgangatho wokuvulwa kwamathuba engqesho ekhaya ngethuba lokhwakhiwa ungabonwa ulungile, kuxhomekeka kumgangatho wokusetyenziswa kwabasebenzi basekuhlaleni ngethuba lenkqubo yokwakhiwa, nasekuqinisekiseni owona mgangatho uphezulu weemeko zabasebenzi.

Eyona mpembelelo ixakayo nenokwenzeka iphathelelene kubungozi obunokuba kho obuphathelelene neemeko zenyukliya. Ngokwasekuhlaleni, ubungozi ngamava ayinyani afunyanwa nguye wonke ubani, ngeendlela ezohlukeneyo. Ubungozi obucingelwayo bungakhokhelela kutshintsho kwindlela abantu abazibona ngayo izinto, nokunothi kutshintshe indlela abaziphethe ngayo. Kubalulekile ke ngoko ukuqinisekisa ukugqithiselwa okukuko kolwazi oluchanekileyo ukuze unxibelelwano lukwazi ukohlula phakathi kobungozi obucingelwayo kwanobo buyinyani.

Iimpembelelo ezibonakalayo

Ngenxa yobungakanani besikhululo senyukliya nendawo esikuyo esekuhleni, engenamithi

elunxwemeni, apho kukho ukubonakalisa okulinganiselweyo kweendidi zomhlaba. Iimpembelelo ezibonakalayo nezinokuba kхо kwezi sayithi zintathu zingabaluleka. Ngaphandle kweempembelelo ezinokuba kхо kubahlali, iimpembelelo ezibonakalayo zingachaphazela iindwendwe kuloo mmandla. Ukunciphisa okucetywayo ziingcaphephe (umz. Umbala wezakhiwo ezikhulu, ukusetyenziswa kwezikrini, ukusetyenziswa kwezikhanyisi ezifanelekileyo, ukubekwa kwindawo efanelekileyo kwendawo yokulahla inkunkuma ephuma xa kugrunjwa, njl njl.) kufuneka kuphunyezwe ukunciphisa iimpembelelo ezinokuba kхо nezingalunganga ukuba isikhululo esicetywayo sithe savunywa.

Iimpembelelo yezelifa

Zontathu ezi sayithi zinembali abalulekileyo, kuba zikwiindawo ezaziwa ngokuba zibalulekile ngokweemfuno ze-archaeology neze-palaeontology. Umyinge lesikhumbuzo sakudala oya kuthi uchatshazelwe eDuynefontein, uya kuba ngaphantsi kakhulu kunalowo waseBantamsklip naseThyspunt. Kanti, i-Duynefontein inobugcalagcala ngokuphathelelene ne-palaeontology.

I-Bantamsklip iphantse ibe nobugcalagcala njengeThyspunt ngokubhekiselele ekutyebeni kwesikhumbuzo sayo. Kanti, iindlela zokunciphisa ziya kuthi zibe sethubeni elihle lokuphumelela eBantamsklip, njengoko iisayithi zesikhumbuzo zibonakala kakuhle yaye zifikeleleka eBantamsklip. Unciphiso lwempembelelo eThyspunt luza kuba lolona lunzima ngenxa yeengxaki zokufikelela, kodwa luya kuba nenzuzo kuluntu lophantsi.

Iimpembelelo zezolimo

Kukho imveliso ekhoyo yezolimo kuzo zontathu ezi sayithi zichaseneyo. Iindidi zeemveliso zezolimo zohluka kakhulu, uumandla ongqonge i-Duynefontein ixubile ngokuphathele kwimfuno nolimo, kuquka ulimo lwengqolowa nediliya. Ukuveliswa kweemveliso zobisi kuko okuphambili kwisayithi yase-Thyspunt, ze ukulinywa kwentyatyambo i-fynbos ibe kuko okuxhaphakileyo eBantamsklip. Ummandla ongqonge i-Bantamsklip nawo unayo imveliso yobisi, iinkomo, iigusha nezinye izilwanyana zasendle.

Eyona nzuzo inkulu ngokubhekiselele ekunyusweni okucingelwayo kwemveliso yezolimo ingase-Thyspunt, ilandelwe yi-Bantamsklip, kuze i-Duynefontein (nengenakukhula kwimveliso). Ezinye iimpembelelo ezinokuthi zibe kхо neziphambili zesikhululo samandla ombane kwezolimo, ingakukhuthiswa kothuli ngethuba lolwakhiwo, ukunqongophala okunokuthi kube kхо kwabasebenzi kwezolimo kunye neziphumo ezihle kwintengo. Nangona ukubaluleka kweempembelelo ezinokuthi zibe kхо zifana kuzo zontathu iisayithi ezichaseneyo, ngokombono wemveliso yezolimo i-Thyspunt yisayithi ekhethwayo, njengoko imveliso yezolimo isenokukhula kule sayithi.

Iimpembelelo zezokhenketho

Uluntu lwaseThyspunt naseBantamsklip luvakalise ukuchasa okumandla kwesikhululo esicetywayo samandla enyukliya. Uluntu lwaseThyspunt luvakalise indawo ebonakalisiweyo yezendalo ekupheleni konxweme, ze uluntu lwaseBantamsklip lwagxininisa kubume obu-ethe-ethe nobutsha bemveliso yezokhenketho ephuhlayo, kunye nemeko yoxhomekeko. Ngeli lixa abanye ababandakanyeka kukhenketho eDuynefontein bechasene nolwakhiwo nokusetyenziswa kwesinye isikhululo zamandla enyukliya, bayaluqonda ushishino olukhulayo olunokuthi lube kхо yaye bekhuthaza ukuqwalaselwa kokhenketho.

Uhlolo lweempembelelo zokhenketho zithelekelele ukuba kuya kuba kхо iimpembelelo engephi enokuthi ibe kхо eDuynefontein ngethuba lolwakhiwo. I-Bantamsklip icingelwa ukuba ibe ne-5 % yempembelelo ezokuthi ibe kхо nelungileyo ngethuba lolwakhiwo, ze i-Thyspunt icingelwe ukuba ibe ne-7.86 % yembelelo engentle kwezokhenketho ngethuba lolwakhiwo. Ngethuba lokusetyenziswa, i-Duynefontein ilindeleke ukuba ibe ne-1.43 % yembelelo ekuphuculweni kwezokhenketho, i-Bantamsklip icingelwa ukuba ibe ne-8.57 % enokuthi ibe kхо ekuphuculweni, ze i-Thyspunt icingelwe ukuba ingabinampembelelo inokuthi ibe kхо. Onke la manani athabathela ingqalelo ukwehla kukhenketho olusekelezwe kwimandla, nokunyuka kukhenketho olusekelezwe kwezorhwebo, nolubhekiselele kwisikhululo esicetywayo samandla enyukliya.

Iimpembelelo zengxolo

Uninzi lweempembelelo zengxolo ezinokuthi zibe kхо ngokwesikhululo samandla ombane

esicetywayo nezingqamene nesikhuulo samandla enyukliya esicetywayo, zimbalewa yaye azibalulekanga kakhulu. Ngenxa yeendlela ezinde phakathi kwezikhululo zamandla ombane ezicetywayo kunye nemida ephakathi kwezakhiwo zikaEskom, akuyi kuba kho zimpembelelo zinokuthi zibe kho zengxolo kwindawo engqongile nayiphi na isayithi echaseneyo ngethuba lolwakhiwo okanye ukusetenziswa kwe-Nuclear-1. Akukho zindlela zizodwa zokuncitshiswa kwengxolo eziya kuthi zifuneka.

Kanti, kuba umzimveliso wombane, i-OCGT, uza kubekwa mgama kwisikhululo samandla ombane sase-Thyspunt (ekupheleni kwale ndawo – ngokungafaniyo nezinye iisayithi), oku kungakhokhelela kwimpembelelo yengxolo eokuthi ibe khona kubahlali abakumgama oziimitha ezili-1 000 ukusuka kule sayithi. Kufuneka ka ngoko kuqatshelwe ukuba i-OCGT ayizukuqhubeka yaye ibandakanyelwe kuphela ukuveliswa kombane ongxamisekileyo. Lo mzimveliso uza kusebenza ngamaxesha athile ngenxa yovavanyo lohlanganyelo oluyimfuneko. Akukho mpembelelo yangxolo ingqamene nokwakhiwa kweendlela ezintsha kwiisayithi ezichaseneyo ilindelekileyo, ngaphandle kwendawo yokungena esentshona eya eThyspunt, apho iya kugqitha kuma-230 eemitha nje zelokishi yaseUmzamowethu.

Impembelelo kwiinkqubo zothutho

Isayithi yaseDuynefontein ayifuni kulungiswa kaya phi kweendlela zothutho ngethuba lolwakhiwo nokusetyenziswa kwe-Nuclear-1, ngokubhekiselele ekudibaneni kweendlela kunye nothutho lwemithwalo enzima. I-Bantamsklip inempembelelo ebalulekileyo kuthutho nethi ibe nemfuneko yokulungiswa ukulungiselela iimeko zongxamiseko zokuhambisa. Ngenxa yendawo ekuyo nekhethekileyo isayithi yase-Bantamsklip, ukuthuthwa kwemithwalo enzima ngendlela kuya kufuna ukulungiswa okumandla kweemeko zothutho, nokuya kuthi kube nempembelelo enkulu kwiindleko. I-Thyspunt idinga ukulungiswa ngokuphathelene neendlela ngokubhekiselele kuthutho lukawonke-wonke kunye neendlela zokungena ngethuba lolwakhiwo. Oku kulungiswa kukwanefuthe kwiindleko zolwakhiwo lwesikhululo samandla ombane kule sayithi.

Ukukhethwa kwesayithi echaseneyo

Uhlolo oluthelekisayo lwezi sayithi zintathu zichaseneyo nolwenziwe ngu-Arcus GIBB lwalusekelezwe koku kulandelayo:

- Iziphumo zophando lweengcaphephe: iingcaphephe zibonakalise ukubaluleka kweempembelelo ezinokuba kho ngokuncitshiswa kuyo nganye kwezi sayithi zichaseneyo zintathu;
- Iqweba lohlanganyelo, elibandakanya zonke iingcaphephe ngowama-24 nowama-25 kuNovemba ka-2009, apho iimpembelelo nokubeka ngokwamanqanaba kwezi sayithi zithe zaxoxwa;
- Iindleko; kunye
- Neemfuneko zokuhambisa nohlanganyelo.

Nangona kukho umohluko ocacileyo phakathi kokubaluleka kweempembelelo zezi sayithi zintathu zichaseneyo, zonke iingcaphephe zivumile ukuba akukho zinto zinobungozi kuyo nayiphi na kuzo (ukuba unciphiso olufanelekileyo luthe lwsetyenziswa) nokuba zontathu ezi sayithi zichaseneyo zikufanele ukwakhiwa kwesikhululo senyukliya ngexesha, ngenxa yonciphiso olwaneleyo lweempembelelo. Nangona isicelo esikhoyo isesesikhululo esinye samandla enyukliya, uhlolo luqinisekise ukuba zonke ezi sayithi zikufanele ukwakhiwa kwezikhululo zamandla enyukliya.

Iimpembelelo ezibalulekileyo emva kokunciptshiswa zithe zabanwa njengezibalulekileyo ukuthabatha isigqibo. Ezi mpembelelo ziphinde zahluzwa ngokwempembelelo eziphambili nezilawulekayo ngenjongo yokuthabatha isigqibo. Ezi mpawu zilandelayo zokuthabatha isigqibo zithe zakhethwa njengezona zibalulekileyo ukuthabatha isigqibo:

- Iimpawu zokuhambisa nokuhlanganyela;
- Ukufaneleka kwezi sayithi;

- limpembelelo zejijomofoloji;
- limpembelelo kwimigxobhozo;
- limpembelelo kwizilwanyana;
- limpembelelo kwizilwanyana ezirhubuluzayo; kunye
- Neempembelelo zezoqoqosho.

Isayithi echaseneyo yase-Bantamsklip ingadla imai eninzi kuba indawo ekuyo ingadingaiindlela ezinde zokuhambisa kunezinye iisayithi ezimbini (ama-900 eekhilomitha zidibene, 765 kV kunye nama-400 kV eendlela zokuhambisa eBantamsklip xa ithelekiswa nama-500 eekhilomitha kunye ne-190 leekhilomitha zama-400 kV eendlela eThyspunt naseDuynefontein ngokufanayo). Ukulungiswa kweendlela neebhulorho ebekunokwenziwa ukuthutha imithwalo enzima ukusuka kwisikhululo seenqanawa saseKapa ukuya eBantamsklip nako kunenxaxheba okuyidlalayo kumaxabiso aphezulu ale sayithi. Isayithi echaseneyo yaseBantamsklip ingaxabisa iibhiloyni ezi-8 zeerandi ngaphantsi kunayo nayiphi na kwezi zimbini. **Nangona kukho iinzuzo ezilungileyo ezinokufunyanwa ngokuthi kulondolozwe indalo kwindawo esemantla ale sayithi, kucingelwa namaxabiso kunye nohlanganyelo, isayithi yaseBantamsklip ibibonwa njengeyona ingenakukhethwa yaze yasuswa ekubeni iqwalaselwe ngokwesi sicelo.** Yi-Thyspunt ne-Duynefontein kuphela ezithe zaqwalaselwa ukuba zikhethelwe isayithi evunyiweyo zaze zathelwe kusetyenziswa ukhetho lwamanani oluthi luthabathe ze luqwalasele kuphela isigqibo ezilinganiselweyo. I-Thyspunt ithe yachongwa njengesayithi ekhethelwe i-Nuclear-1.

Eyona ngxoxo ibalulekileyo ethethelela i-Thyspunt ngokubhekiselele kwiimpembelelo zebhayoloji ziinzuzo zolondolozo ezinokuvunywa ngokulawulwa kwendawo yokungena nokuphathwa kakuhle kwesayithi xa kuthe kwakhiwe isikhululo samandla enyukliya. Le nzuzo ayinakufunyanwa eDuynefontein, njengokuba i-Koeberg Private Nature Reserve sele iquka isayithi yase-Duynefontein. Ukongeza, isayithi yase-Thyspunt inembali yobungozi obungephi, kwanokuba sendaweni efanelekileyo ngokubhekiselele kwiimfuneko zika-Eskom zokuhlanganyela nenkqubo yokuhambisa. Isayithi yase-Thyspunt iyanconywa ukuba ivunywe ngokubhekiselele kwesi sicelo. Kuyavunywa ukuba isayithi yase-Thyspunt inganeempembelelo zokusingqongileyo ezibaluleke kakhulu (ingakumbi iimpembelelo zebhayoloji) kune-Duynefontein. Kanti, ukulondolozwa kwentsalela yale sayithi ngokulawula ulondolozo lwayo kubaluleke kakhulu yaye kuneempembelelo ezilungileyo ezingqamene nayo. Ukuncitshiswa kweempembelelo ezichongiweyo nezinokuba kho nezivunywe ziingcaphephe nakule EIR kufuneka ziqinisekise.

Iindlela zokuvelisa (phehla) amandla ombane

Ngokweetekhnoloji zokuvelisa amandla ombane, imveliso yamandla enyukliya nemveliso yokubaswa kwamalahle, zizezona tekhnoloji zisisiseko esiqinisekisiweyo. **Ezi mveliso zimbini zamalahle abasiweyo azinakulungela iingingqi ezingaselunxwemeni lweNtshona - Koloni neMpuma-Koloni.** Umnikelo wemveliso (phehlo) yombane wenyukliya ngomjikelo wobom, kumoya onobushushu obugqithileyo, mncinane xa kuthelekiswa nombane oveliswa (phehlwa)ngamalahle. Le nto ibonisa ukuba ukuveliswa kombane wenyukliya sisicwangciso sobuchule esiyimfuneko eMzantsi Afrika ukuze kongezwe malunga nama-40 000 MW ombane ngonyaka wama-2025. Oovimba bamandla ombane abahlaziyiweyo njenge sola, kunye namandla omoya abakwazi ukunika imveliso efunekayo esisisiseko eqinisekisiweyo.

Iindidi zemveliso yeNyukliya ezicacileyo

IiPWR zezona zixhobo ziqhelekileyo zokwenza amandla e-athom ezisetyenziswa kwilizwe lonke. Isikhululo senyukliya saseKoeberg sisebenzisa itekhnoloji eyi PWR kwaye luhlobo lokuvelisa amandla ombane elivavanyiweyo nelisebenze ngokukhuselekileyo iminyaka engama-24. U-Eskom uyiqhelile itekhnoloji ngokubhekiselel kwezempilo nokhuseleko kwakunye nendlela yokuyisebenzisa.

Iindlela zothutho

Uthutho ngokwasendleleni lwamkeleke njengesona sisombululo ekukuphela kwaso sokuthutha imithwalo enzima ukusuka kumazibuko ase Duynefontein nase Thyspunt. Kanti eBantamsklip ngenxa yobukhulu bomsebenzi wokuphuculwa kwendlela nebhlorho okuza kufuneka kwenziwe ukuze kuthuthwe izixhobo ezinzima, ukusuka kwizibuko laseKapa, kucetyiswe uthutho ngesikhephe

esinesinqe esibanzi njengendlela engenye kunokuba kusetyenziswe uthutho ngendlela..

Impembelelo yentlalo enxulumene nokuthutha ngesikhephe esinesinqe esibanzi, iyakuba ngaphantsi kunaleyo yothutho lwendlela njengoko uthutho ngendlela lunokubangela ulibaziseko endleleni ingakumbi kwiindawo ezidlula ezintabeni phakathi kweKapa neBantamsklip.

Ukuba kusetyenziswe isikhephe esinesinqe esibanzi phakathi kweKapa neBantamsklip, kuya kufuneka kwakhiwe iindawo ezilungele ukulayisha nokothula ngaselwandle kufuphi nesayithi yaseBantamsklip. Umthwalo kuya kufuneka ke ngoko uthuthwe ngendlela ukusuka kwindawo inqanawa eme kuyo ukuya kwisayithi yaseBantamsklip. Le ndlela ingenye efuna ukuba umthwalo onzima uthuthwe ngeendlela ezahlukeneyo ngaphezulu kunaxa umthwalo uthuthwe ngesithuthi sasendleleni, kwaye ngako oko, ibonwa njengecebo lokugqibela. Ngokwemeko-bume le ndlela ingenye, ebonwa njengengamkelekanga, ngenxa yempembelelo ebalulekileyo enokukhokelela ekwakhiweni kwendawo yokumisa inqanawa enesinqe esibanzi. Nangona kungakhange kwenziwe luphononongo lweendawo ezinokulungiselelwa ukumisa, uphononongo lweverthebrate izilo, kunye nolwamafa luchonge unxweme olugudle isayithi yaseBantamsklip njengolungenakho ukumelana nokuphazanyiswa. Nakweyiphi imeko, ulwakhiwo lwendawo yokumisa isikhephe esinesinqe esibanzi lufuna inkqubo yeEIA. eyahlukeneyo.

Ukugxuphuleka kwemithwalo enzima eBantamsklip, kukhatyiwe njengendlela engenye kule EIR. Ukuba uEskom ufuna ukuqhuba nale ndlela ingenye, inkqubo ye-EIA eyodwa kuya kufuneka igunyaziswe, njengoko indawo yokumisa ingakhange icingwe kule EIA.

Ubume besikhululo senyukliya kwisayithi

Umzila woyilo wokuqala wesayithi nganye yesikhululo samandla ombane waqalwa ngu-Eskom. Olu yilo lwaboniswa iingcaphephe lwaza lwacokiswa kulungiselelwa izinto ebezixhalabisa nezazivezwe zingcaphephe kumaxesha amaninzi ocweyo olwenziwa ziingcaphephe phakathi kwenyanga kaAgasti ngowe- 2008 noNovemba wama- 2009. Iimephu zazo zonke iingcaphephe zadityaniswa kwaveliswa iimephu ezibonisa imimandla eyiyeyona ifanelekileyo ngokobume bendawo ecetyelwa isikhululo samandla enyukliya. Ezi mephu zibonisiwe **kwCandelo 9.28.13** lale ngxelo. Ukugqityezelwa koyilo lwesayithi luya kufuna uphando olunzulu ukuba esi sikhululo samandla ombane sigunyazisiwe ngokubonisana kweengcaphephe ezinamava afanelekileyo noqeqesho, naxa kuthe kwaqinisekiswa malunga nesayithi kunye nodidi lwesikhululo.

Ngokubhekiselele kubungakanani beendawo ezifanele isikhululo samandla enyukliya (phakathi kwe-73.79ha ne 172ha) kunye nobungakanani obucetywayo bomzila weNyukliya -1, (31ha) kuya kuba lula ukwakha ezinye izikhululo ezongezelelweyo zamandla ombane enyukliya ngaphandle kweNyukliya-1 kuzo zonke iisayithi ezizezinye.

Nangona kukhankanyiwe ngasentla iingcebiso ezibanzi malunga nenani lezikhululo zamandla ombane ezinokwakhiwa kwisayithi nganye, kufuneka kugxininiswe ukuba isicelo esikhoyo sesesayithi enye yamandla enyukliya ebukhulu bungama -4 000MW. Impembelelo yezikhululo ezizezinye zamandla enyukliya kwisayithi ethile (ukuba zigunyazisiwe) kuya kufuneka ziqinisekise kwinkqubo entsha yeEIA phambi kokuba kuqalwe ukwakhiwa.

Ukusetyenziswa kwamanzi atsalwe phantsi komhlaba

Kufuneka kutsalwe amanzi phantsi komhlaba kuzo zontathu iisayithi ukuze kube nokugrunjwa kulungiselelwe ukwakha iplatformu yesiQithi seNyukliya. Kusenokukhethwa ukugcinwa nokusetyenziswa kwamanzi akwisayithi kunaleyo indlela yokutsala amanzi phantsi komhlaba. Nokuba kunjalo, ngenxa yomthamo wamanzi anokukutsalwa ngaphantsi komhlaba ingakumbi eThyspunt (isayithi ekukuphela kwayo enomthamo wamanzi aphantsi komhlaba anokubaluncedo) amanye amanzi kungafuneka ukuba akhutshelwe elwandle. Ukuthunyelwa kwala manzi kulawo akwamansipalati akubonwa njengento enokwenzeka kuyo nakweyiphi isayithi, ngenxa yomgama ukusuka kwesona sixeko sikufutshane. **Ngako oko, kucetyiswa indibanisela yolondolozo nokuthunyelwa elwandle Ngokweziphumo zohlolo lolwandlekazi (isiHlomelo E16) kunye**

nohlolo lwenzululwazi ngeenqanawa zorhwebo (isiHlomelo E15), ezithi zichithele elwandle izinto ezimdaka aziyi kuba nagalelo ligxekekayo ngokubalulekileyo, ezi ndibanisela zeendlela ezahlukeneyo zibonwa njengezamkelekileyo ngokobume bemeko.

Ubonelelo lwamanzi amatsha (afreshi)

Kuzo zonke iisayithi ukususwa kwetyuwa emanzini kuqinisekisa ngobonelelo lwamanzi amatsha (afreshi) kubomi bonke besikhululo esicetywayo samandla enyukliya ngaphandle kokufaka emngciphekweni ukufumaneka kwamanzi amatsha kubasebenzisi abangabanye. **Umsebenzi wokukhutshwa kwetyuwa emanzini yenye indlela ekhethwayo ukubonelela ngamanzi amatsha kuzo zonke isayithi.**

uLawulo lwamanzi anetyuwa

ukulahlelwa kwamanzi anetyuwa elwandle okanye ukulahlelwa kunye nokupholiswa kwamanzi elwandle kwamkelekile ngokwemeko bume. Ukulahlelwa kwamanzi anetyuwa elwandle kufuneka kusetyenziswe kuphela xa kusakhiwa, kwaye amanzi anetyuwa kufuneka axutywe namanzi apholileyo akhutshelwa elwandle ngexesha lesigaba sokusebenza

Indawo angena kuyo amanzi aselwandle

Ukufakelwa kwemibhobho angena kuyo amanzi kunye neyokukhupha amanzi, kubandakanya ukufakelwa kwemibhobho etsala amanzi kulwandlekazi ze itsalele ngaphantsi kolwandle amanzi apholileyo kwindawo yokulondoloza (Isitya sokutsala) efakelwe kufuphi nempompo yendawo yamanzi apholileyo, kuphela kweyona inokusetyenziselwa zontathu isayithi.

Umjelo ovela eFektriwe ohambisa amanzi amdaka neeKhemikhali ezingcolileyo.

imijelo yeekhemikhali ezingcolileyo kunye namanzi apholileyo kufuneka zibe **kude nonxweme**. Zonke izinto ezikhutshwayo kufuneka zenzeke kumgama ofanelekileyo njengoko iingcaphephe zichaze njalo, ngaphandle kokuba amanyathelo okuthomalalisa akhankanyiweyo kwingxelo yenzululwazi yenqanawa zorhwebo athotyelwe, ukukhutshwa kwamanzi amdaka mgama nonxweme yeyona nto kucetyiswa ukuba yenye indlela esetyenziswayo.

uLawulo lwezinto ezonakeleyo

Ngokubhekiselele kwiziphumo zomzekelo wolwandlekazi kunye nempembelelo yohlolo, **(isiHlomelo E15)**, kucetyiswa ukuba izinto ezonakeleyo ezicolekileyo zilahlwe kwindawo yeenqanawa zorhwebo, njengoko kucetyiswe njalo luphando lwenqanawa zorhwebo, kunye nophando lwenzululwazi yeenqanawa zorhwebo kuzo zonke isayithi. Intsalela engenakumpontshelwa elwandle mayilahlelwe emhlabeni ize isetyenziswe njengokulungelelanisa iyadi yeHV ukunciphisa umzila kwihlabathi. Iindawo zokulahla izinto ezonakeleyo ekufuneka zibe semhlabeni mazibekwe zilungiswe ukuze zizalisekise indima yokhuselo lokubona kwaye kufuneka ziyilwe ukuze zicuthe impembelelo ebonakalayo. Inzululwazi yokwakha kufuneka incedise ekuyileni iindawo zokulahla izinto ezonakeleyo ukwenzela le njongo. Uthutho lwezinto ezonakeleyo ukuya kwindawo yaseThyspunt ngebhanti elihambisa izinto alilocebo, ngenxa yobuthathaka obubodwa beenduli zentlabathi ezikunxweme lwe Oyster Bay, ekuya kufuneka ukuba olo thutho lunqumle khona.

Iindawo zokungena kwisayithi yase Thyspunt

Iindawo yokungena engaseNtla yeThyspunt ngokucacileyo ayisetyenziswa kangako njengaleyo ingaseNtshona, ngenxa yeempembelelo kulimo, izityalo, imigxobhozo nezinto zamafa. Indlela yokungena ngaseNtla ikhethwa kuphela ngenxa yempembelelo zokubonakalayo. Impembelelo ezikubonakalayo kuleyo yangaseNtshona (ikakhulu ngokunxulumene notshintsho lwendawo) zincinane xa kuthlekiswa notshintsho lulonke lwendawo olubangelwa bubukho besikhululo

samandla enyukliya. Xa kuqwalaselwa zonke iimpembelelo, indawo yokuNgena yaseNtshona yeyona ikhethwayo ukuya kwisayithi yaseThyspunt.

Ukulahlwa kweNkunkuma

Eyona ndawo inokusebenza yokulahlwa kweqondo eliseZantsi neliphakathi lokungcola obunobungozi yisayithi yeNukliya eseVaalputs, njengoko ikukuphela kwayo egunyazisiweyo yolu hlobo lwenkunkuma eMzantsi Afrika. IVaalputs inomthamo owaneleyo wenkunkuma eyakuveliswa yiNyukliya -1.

Malunga nenkunkuma ekwiqondo eliPhezulu, (i-oyile esebenzileyo), indawo ekukuphela kwayo ekhoyo eMzantsi Afrika, lulondolozo lwexesha elide lwe-oyile esebenzileyo kwisikhululo samandla enyukliya, iVaalputs ibonwa njengesayithi yokulahlwa inkunkuma yeqondo eliPhezulu kodwa isigunyaziso sale nkqubo siya kuthatha iminyaka eliqela, ngako oko ukulahlwa kwe-oyile esetyenzisiweyo kule sayithi akwenzeki.

Enye indlela iNo-Go

Njengoko ibango lamandla ombane lisekelwe kuphuhliso loqoqosho eMzantsi Afrika, enye indlela i-No-Go ayibonwa njengenye enokusetyenziswa njengoko igunya likaEskom ikukubonelela ngamandla ombane kwilizwe. U-Eskom kwiimeko zonke uya kwenza isicelo sokuphuhlisa izikhululo ezingaphezulu zamalahle ukuba esi sicelo sangoku sikhathiwe. Iimpembelelo zamandla aveliswa ngamalahle kubume bemeko yomjikelo wobom, zingamandla kakhulu kunezo ziveliswa yinyukliya.

Kuza kuba nzima kwilixa elizayo ukuvelisa izikhululo ezivelisa amandla ngamalahle, ngenxa yerhafu yekhabhoni eza kunyanzeliswa kumazwe aqhubeka nokuvelisa imimoya enobushushu obugqithileyo.. Indlela engenye eyiNo-Go iya kuthetha ukuba iinzuzo ezivela kwiprojekthi ecetywayo, aziyi kufumaneka. Ngako oko ke, kubalulekile ukulinganisa iminqweno, iimfuno kunye neengcamango zamazwe angabamelwane kunye neminqweno yelizwe ukuze kufumaneka uthungelwano ngombane oluqinisekileyo olubonelela ngophuhliso oluzinzileyo lwexesha elide kuqoqosho loMzantsi Afrika. Nangona kuya kuzanywa ukuqandwa kweimpembelelo ezingalunganga zale Projekthi icetywayo ngokusetyenziswa kwe- No-Go, kunyanzelekile ukuba uMzantsi Afrika ube nakho ukukhulisa imveliso yamandla ombane ingakumbi eNtshona naseMpuma-Koloni.

Indawo yokuhlala

Ubukhulu beprojekthi ecetywayo nenani labasebenzi elifunekayo ngexesha lokwakha, nezigaba zokusebenza, kufuneka ukuba u-Eskom aqaphele iindlela ezahlukeneyo zokuhlalisa abantu. Ukwakhiwa kweendawo zokuhlala akuyiyo inxalenye yekhorido yeEIA kwaye kuya kuba yinxalenye yenkqubo eyodwa yeEIA, ukuba kukho imfuneko. Nangona kunjalo kufuneka kuqatshelwe ukuba isicwangciso sobuchule sokuhlalisa abantu siyaxoxwa , kwaye iimpembelelo ezinokubakho zivavanywe zingcaphephe zentlalo.

Imilinganiselo ephambili yokuthomalalisa neemeko zokugunyazisa

Iziphumo zophando lwengcaphephe olwenziwe malunga neEIA lunika uhlolo oluzisa iimpembelelo eziluncedo kunye nezo zingalunganga ngenxa yale projekthi icetywayo. Iziphumo ziveza ukuba akukho ziphene zobume-meko ezinokuqanda ukuqhubeka kweprojekthi ecetywayo nakweyiphina isayithi, ngaphandle kokuba iingcebiso zemiqathango yokuthomalalisa nokulawula ziyazalisekiswa.

Nangona isayithi i-Thyspunt iyeyona ikhethwe njengefanele ukugunyaziswa, kusekho inani leimpembelelo eziphakamileyo neziphambili kule sayithi. Ukuze kuzuzwe kulondolozo kule sayithi, kunyanzelekile ukuba iingcebiso eziqukathwe kwiEIR, kwisiCwangciso soLawulo loBume beMeko (EMP), zokuthintela ezikwisifundo sengcaphephe sizalisekise ngokungqongqo. Imilinganiselo yokuthintela impembelelo kwizityalo, kwizilwanyana. Imilinganiselo yokuthomalalisa impembelelo kwizityalo, kwiverthebhathe ne-invertebhathe, kwizilwanyana, nezinto zamafa ibalulekile kakhulu. Ukuthomalaliswa kwempembelelo kwizinto zamafa kuya kufuna iqela elilodwa eliza kusebenza

kwisayithi ligrumbe ixesha leminyaka phambi kokuba kuqaliswa ngolwakhiwo. Kubalulekile kanjalo ukubandakanya iingcaphephe eziqeqeshiweyo nezinamava kwizityalo imigxobhozo, i-verthebhrathe, i-inverthebhrathe, ijyomofoloji yeenduli zentlabathi namafa, ukuze kufumaneka indawo yokungena efanelekileyo yaseMpuma kwiThyspunt.

Ukuphumelela kolawulo lwemigangatho efanelekileyo yobume bemeko, nokuqinisekisa iziphumo zezifundo zobume bemeko ukuba ziyazalisekiswa ngendlela ephathekayo, iingcebiso (kuquka ubuchule beengcebiso zeengcaphephe) kule EIA zibandakanyiwe kwi EMP (ngokuthobela imiqathango 34 yeNEMA ebandakanyiweyo **kwisiHlomelo F**). Le EMP ifanele ukuba yinxalenye yesivumelwano nabakhi abaqeshiweyo bokwakha isikhululo samandla ombane kunye nezakhiwo ezisecaleni. I –EMP imele ukusetyenziswa ukuqinisekisa ukuthotyelwa kweenkcukacha zobume bemeko kunye nemilinganiselo yolawulo ngexesha lazo zonke izigaba zeprojekthi. Ukuzalisekiswa kweEMP kusenzelwa izigaba zomjikelo wobom, (oko kukuthi, ulwakhiwo, ukusebenza kunye noqhawulo lwesivumelano sentengo) kufanelekile.

I EMP luxwebhu olutshintsha- tshintshayo njengoko kufumaneka ulwazi olutsha ekuhambeni kwexesha, okanye njengoko kubakho izifundo ezitsha ezifundwayo xa kuzalisekiswa iingcebiso, kwaye i-EMP kufuneka ihlaziye lonke ixesha.

IZIGQIBO NEENGCEBISO

Nangona kukho umahluko ocacileyo phakathi kwentsingiselo yempembelelo yezinye iisayithi ezintathu, zonke iingcaphephe ziyavumelana ukuba akukho mposiso zinobungozi kuyo nayiphina isayithi (ukuba ngaba izithomalalisi ezifanelekileyo zizalisekisiwe), kwaye zonke ezi sayithi zintathu zizezinye zikulungele ukwakhiwa kwesikhululo samandla ombane, ngokuthi kuqinisekise ukuthomalalisiwa kweempembelelo. Ngokubhekiselele kwiimpembelelo zobume bemeko, ingqwalasela kwezemali nemfuneko yokomeleza umanyano lokuthungelana eMpuma Koloni, i-EIA icebisa ukusetyenziswa kweThyspunt njengesayithi ekhethiweyo yeNyukliya- 1.

Kucetyiswa ukuba yonke imilinganiselo yokuthomalalisa evezwe ziingcaphephe ezinobuchule ezikwi –EIR, ingakumbi ukuzalisekiswa kweenkcukacha ezikwi EMP zizalisekisiwe, nje ukuba isigunyaziso sokwakha, sokusebenza kunye nokuqhawulwa kwesivumelwano sentsebenziswano sesikhululo samandla enyukliya eThyspunt sinikezelwe yi DEA.

INDLELA EYA PHAMBILI

iNNR igunyazisiwe yiNNRA ukuba inikezele ngokhuseleko lwabantu, izinto zabantu kunye nobume bemeko kumonakalo wenyukliya, ngokuthi kusekwe imigangatho yokhuseleko kunye neendlela zolawulo. Ngokubhekiselele kwiCandelo 21 le NNRA, u-Eskom kufuneka angenise isicelo ngokusesikweni selayisenisi yokwenza isikhululo samandla enyukliya, isayithi, ukwakha, ukusebenza, ukususa isidyobho sento enobungozi nokuqhawula isivumelwano sentengo. UMthetho unika ithuba iBhodi yeNNR ukuba ibambe imihlangano kawonke –wonke ngokubhekisele kwimpilo, ukhuseleko nemicimbi yobume bemeko ebhekisele kwisicelo eso.

NgokomGaqo-Siseko weRiphabhliki yoMzantsi Afrika (Umthetho No. 108 yowe-1996) kunye noMthetho oyi- National Environmental Management Act, iDEA inoxanduva lokuhlola impembelelo yesikhululo samandla ombane kubume bemeko. Ukwamkela uxanduva olucacileyo oluntlambulubini malunga nohlolo lwengozi zokukhupha imitha, iNNR kunye neDEA isayine isivumelwano sentsebenziswano apho ivumayo ukuba iDEA, njengeziphatha- mandla kwimicimbi yobume bemeko, kunye ne NNR ziya kusebenzisana kuhlolo lwemicimbi enxulumene nenyukliya. Malunga noku, iingcaphephe zezifundo zemiba yeradiyoloji zibandakanyiwe kulwazi njengoko iDEA ingasayi kuqwalasela iimpembelelo zeradiyoloji ekuthatheni izigqibo.

IDrafti ye- EIR isasaziwe ukuze abantu banike izimvo zabo kuzo zonke i-I &AP kangangexesha elizintsuku ezinga- 66. Inani leendibano zikawonke-wonke ziya kubanjwa ngexesha lokuveza izimvo kwiDraft eyi –EIR (**jonga izibhengezo neeleta** ezazisa abantu ababhalisileyo isiHlomelo **D** malunga

neeNtlanganiso zikaWonke-wonke kwakunye nezimemo zeeNtlanganiso, izimemo kwiNtlanganiso yabantu abaphambili) izimvo kolu xwebhu ziya kuqatshelwa ngu Arcus GIBB kwaye iimpindulo kulo ziya kunikezelwa kwingxelo yemiCimbi neNgxelo (IRR) phambi kokungeniswa kweyokuGqibela iEIR kwiDEA ukuze ithathe isigqibo.

Kuyaqikelelwa ukuba iDEDA kunye neDEA neDP ngokulandelelana kunye neNNR (kwamanye amaSebe kaRhulument) iya kunika izimvo kwi DEA malunga nokufezeka kweEIR yokugqibela kwaye iDEA iya kuziqaphela ezi zimvo phambi kokuba yenze isigqibo malunga nokwamkeleka kweprojekthi yeNyukliya 1. Zonke i- I&AP ziya kwaziswa malunga nokufumaneka kolwazi kanjalo nesigqibo seDEA.